EQUITY IN EDUCATION THEMATIC REVIEW

NORWAY

COUNTRY NOTE

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TABLE OF CONTENTS

EXECUTIVE SUMMARY AND RECOMMENDATIONS

Norway has an expensive education system. The results from international tests show that Norwegian fifteen-year-old pupils perform only at an average OECD level and that there is a bigger than average dispersion of scores despite the high level of equity within the system. Results from international assessments of adults of varying ages, however, show that Norway has one of the best educated working populations in the world. The integration of general and vocational courses within the same institutions and the lack of dead ends within the system together with a smooth transition to working life enable young people to continue learning and increasing their skills. Overall, Norwegian education has both strengths and weaknesses.

This Country Note has been prepared as part of the OECD Thematic Review of Equity in Education. The Country Analytical Report was prepared by an independent researcher - Vibeke Opheim of NIFU. The team of examiners included experts from Belgium and UK and two members of the OECD Secretariat. Unfortunately, due to illness the expert from Belgium was unable to fulfil her role.

The Review Team met on some sixty occasions over a ten day period in November 2004. It visited six schools or colleges, participated in meetings with officials, head teachers, teachers, parents, pupils and representatives from across the education system. The information gathered has been collated, analysed and debated over a five month period.

The full terms of reference were agreed with the Ministry of Education and Research. These focused on two key questions: how equitable is the Norwegian education system and what is its capacity – taking account of recent reform initiatives – to identify and resolve problems of equity.

The Norwegian education system is soundly structured and generally highly equitable. In terms of selection, access and transition it compares well with other countries. Norwegian young people at age 15 perform in international tests at the OECD average level but tests in the same year show Norwegian young adults outperforming most of their peers so as to become world leaders in measures of adult literacy. The interpretation of this apparent paradox is not straightforward, but one possibility is that school provision, while apparently unchallenging may avoid the stigma of educational failure and, in the process, develop the motivation to continue learning.

Up to now the Norwegian education system has had only a limited capacity to identify and resolve problems of equity. Its philosophical basis places equity at the heart of its endeavour but the lack of systematic information about pupils' progress and the absence of means to evaluate the work of schools has meant that problems have not been recognised. Recent reforms have gone some way towards rectifying this situation. The establishment of the *Skoleporten* means that a great deal of information about schools is now in the public domain. But issues to do with the use of pupil tests and school choice are complex and contain risks as well as opportunities.

The strategy for improvement which is proposed in a series of detailed recommendations is predicated upon a cautious approach to further reform designed to improve the educational outcomes of fifteen-year-olds without damaging the system which apparently leads to adult success. Such a cautious approach

would enable recent changes to be evaluated and any unintended consequences to be addressed, as well as reducing any risks of unbalancing what is, in essence, a successful and highly equitable system.

Recommendations

Building on Strengths

1. The basic structure of the education system should be preserved.

2. The current level of investment in education should be maintained.

3. The comprehensive, non-streamed model of schooling should be retained.

4. An increased emphasis should be given to the principle of adaptive learning.

5. Anti-bullying programmes, research and development should be maintained.

6. The life-long learning perspective should be retained.

7. Parity of esteem between general and vocational education should be preserved and the follow-up counselling service improved.

8. Reforms in basic education should be implemented cautiously, and monitored carefully, to ensure that smooth transitions from school to work are not damaged, and that high levels of adult literacy are maintained.

9. Additional suitable provision should be made for adults (including immigrants) who wish to pursue primary and secondary education courses.

10. The scope for innovation should be preserved and enhanced, particularly where it may improve equity.

Addressing Weaknesses

11. Abolition of the cash-benefit scheme and in future spending rounds – within a necessarily limited budget - priority should be given to support for early childhood education and care over the costs of tertiary education.

12. Municipalities, the teachers' and the school students' unions and parents' representatives should draw up local rules for acceptable classroom behaviour.

13. Research should be undertaken into ways of supporting the early learning of disadvantaged pupils in danger of underachieving.

14. Municipalities, the teachers' and school students' unions should establish a working party to explore how expectations about pupils' intellectual capabilities can be raised.

15. The establishment of a research project to consider how age-related subject benchmarks can be developed alongside the new testing programme.

16. The Ministry should pause after the initial rounds of testing, and the publication of *Skoleporten* results, to assess the impact of what has been done so far, and to consult on the next steps with the interested parties. In so doing it should:

    - attend to the risk that variation in schools' quality might be increased by the flow of information in *Skoleporten*;

    - examine the experience of assessment in Sweden and Finland;

    - support the development of *'added-value'* measures, and

    - launch discussions with municipalities and other stakeholders on the implications of potential increased demand for school choice.

17. The ministry and municipalities work with the teaching unions to devise a suitable range of intervention strategies.

18. The associations of local government and the head teachers unions write guidelines to deal with school interventions.

19. The ministry engages with the municipal authorities and the offices of the county governors in order to create an appropriate '*light-touch'* monitoring procedure.

20. The time devoted to multicultural, bilingual and special education issues in teacher training should be increased.

21. The funding methods used to support the needs of immigrants should be reviewed after consultation with ethnic minorities.

These recommendations have been designed to rectify the weaknesses of the education system whilst building on its considerable strengths. They need to be addressed in ways which are consistent with Norwegian traditions and culture. A successful response will require the active participation of those involved with the education system: Government, local authorities, the unions of head teachers, teachers and pupils, and parents. The benefits of such an improved system will be felt initially by Norwegian learners but, ultimately, by future Norwegian society.

1. INTRODUCTION

1.1 The thematic review

This country note was prepared as part of the OECD thematic review of equity in education across member countries. The review aims to assist countries in developing and implementing effective policies for equity in education. It examines the contribution of different phases of education to lifetime equity and inequity and looks, in particular, at socio-economic, ethnic, regional and gender issues. The thematic review is primarily concerned with equality of opportunity while recognising that relative equality of outcomes is often used as an indicator of equality of opportunity. Ten countries are participating in the activity - Belgium (Flemish region), Finland, France, Hungary, Norway, the Russian Federation, Slovenia, Spain, Sweden, and Switzerland.

The thematic review involves four separate strands of work. Each participating country prepares an *analytical report* on equity in education; *country visits* by teams of experts take place in a subset of participating countries; and a *statistical profile* of all OECD countries, in respect of educational equity, is prepared. All four strands of work feed into the preparation of a *final comparative report*.

The analytical reports describe each country's context and current equity situation, provide a profile of equity in education, examine causes and explanations, and explore the effectiveness of existing policies and potential policy solutions to problems. Each report is supported by data, where they exist, on a specified range of indicators of participation, attainment and labour market outcomes by ethnicity, region, socio-economic status and gender, alongside data taken from the Programme for International Student Assessment (PISA) and the International Adult Learning Study (IALS).

Five of the participant countries - Finland, Hungary, Norway, Spain and Sweden – have agreed to a country visit. The object of these visits is to assess policy through the exploration of the perspectives of different stakeholders and through the observation of practice in specific institutional contexts. This involves the participation of a team of experts able to conduct an in-depth examination of policy and practice and to prepare a country note containing policy recommendations. The note which follows is the country note for Norway.

The OECD will prepare a final comparative report on the countries involved set in the wider context of OECD countries. Drawing on the analytical reports, the country notes and other strands of work, this report will aim to draw general policy lessons about how to improve equity in education. Much existing OECD work on education bears on equity issues and the final report will make full use of this substantial corpus of work. It will draw, in particular, on the results of previous thematic reviews – early childhood education, transition from school to work and adult learning – and on the results of the various PISA studies.

This main author for this country note was the rapporteur for the exercise, Peter Mortimore. The other experts on the team, Beatriz Pont and Simon Field, also contributed to the writing and the team as a whole take responsibility for the final text.

1.2 The Norwegian visit and country note

The full terms of reference of this exercise, contained in annex 5, are wide-ranging. They require the review team to "provide an overall assessment of how well Norway's educational system delivers equity in education, and its capacity to identify and resolve equity problems as they arise. This will entail a wide-ranging overview of Norway's educational system." The terms of reference also noted the reforms under way at the time of the review visit in November 2004, including those contained in the White Paper on the 'Culture for Learning'. The terms of reference require the team "to address these reforms when offering policy recommendations, while recognising that they cannot be evaluated at this early stage. The team should aim to identify how well the planned reforms address any policy problems identified and provide constructive advice on the development and evaluation of these reforms."

We have attempted to meet this brief.

1.3 General approach

We began the Review with the premise that the equity of the system should be considered within the context of life-long learning. Thus, although we shall examine the outcomes of pupils during their school years we will make our final judgements taking into account adult learning including work-based training and provision for newly arrived immigrants.

1.4 Methodology adopted

A ten day visit was undertaken by the Team in November 2004. The visit included:

- approximately 60 sessions with 6 visits to schools or colleges
- thirteen meetings with officials from the Education and other ministries
- four discussions with county and municipal authorities
- four seminars with academics
- six sessions with unions, business and special interest groups.

In all we engaged with about 200 people of whom at least 30 were pupils or students.

A first draft of this report was sent to the Norwegian Ministry of Education in July 2005. Full detailed comments on the report covering issues of fact and argument were received from the Ministry in October 2005, and this revised draft has been prepared in the light of the comments received.

In addition to this short introduction which forms Section 1, the structure of the Report is as follows: In Section 2, we describe the history of Norway, its demographic, economic and social conditions and on the current political situation. We describe its education system including recent changes and proposed reforms.

In Section 3, we pose - and then endeavour to answer - the question of how equitable is the current educational system. We deal with matters concerning funding, transition, access and selection. This section also examines international comparative evidence of literacy, maths and science skills at different ages. We will also make use of some of the *softer* data from PISA concerning pupils' attitudes and behaviour. In this section we examine whether Norway has an inclusive approach to quality learning as well as the

availability of second chances within the education system. We also consider a number of educational issues associated with disadvantage.

Section 4 sets out our assessment of the capacity within the current education system to identify and resolve problems of inequity. This section includes a discussion of the proposed reforms announced by the Norwegian Ministry of Education and our judgments of how likely these are to achieve the desired improvements.

In Section 5, we discuss the strengths and weaknesses of the system with regard to the pursuit of equity. We also provide a list of recommendations which we believe would lead to further system-wide improvement.

2. BACKGROUND TO THE REVIEW

2.1 National history

Norway was ruled for four hundred years by Denmark and then, at the conclusion of the Napoleonic wars, it became part of a joint kingdom with Sweden. The country was established as an independent constitutional monarchy in 1905. In 1960 Norway joined the European Free Trade Association but, following referenda held in 1972 and 1994, Norway remains outside of the European Union.

2.2 Demographic conditions

The population of the country is approximately 4.5 million, of whom about 500 000 live in the capital Oslo. The 45 000 Sami people live mainly in the North of the country or in the capital. A community of Finnish descent lives in southern Norway. 74% of the total population live in towns or built-up districts. The remainder live in areas of scattered populations along a deeply indented coastline, on islands or alongside the many fjords. In recent years, Norway has permitted the entry of a number of immigrants (300 000 by 2002). Immigrants make up 7.6% of the population of 0-9 year-olds and 7.2% of 10-19 year-olds. The largest groups of non-Western minorities are from Pakistan, Iraq, Bosnia and Herzegovina, Vietnam, Iran and Somalia.

2.3 Economic conditions

Norway is a rich country with one of the highest gross domestic products per capita in the world. It is also a country with a relatively high employment rate.[1] The unemployment rate in 2004 was 4.7%. Norway is the fifth most equitable country in the OECD on the Gini Index[2] – a measure indicating its relative income equity in economic terms. The national budget in 2004 was nearly 130 billion kronor, around 15 billion euros. The Education budget in the same year was equal to 6.8% of the GDP, one of the highest figures in the OECD.

The main industries, in which the labour force of 2.35 million work, are agriculture, fishing and farming (about 4%); industry - petrol, gas, food processing, ship building, pulp and paper, metals, chemicals, timber, mining and textiles (about 22%); and services (about 74%).

[1] OECD (2004) Main Economic Indicators, *OECD in Figures: Statistics on the Member Countries*. Paris

[2] The Gini index measures the extent to which the distribution of income (or consumption) among individuals or households within a country deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. A value of 0 represents perfect equality, a value of 100 perfect inequality.

2.4 Political situation

Norway has a unicameral parliament – the *Storting* – whose 169 members are elected to serve four-year terms by popular vote through a method of proportional representation[3]. There was a general election in September 2005. The Labour Party, the Socialist Left Party and the Centre Party have the majority in the new Storting, and formed a new Government in mid- October.

2.5 Education service

The *Storting* and the Government define the goals and provide the budgetary frameworks for education. Preschool provision is overseen by the Ministry of Children and Family Affairs. The schools, universities and university colleges are the responsibility of the Ministry for Education and Research. Other ministries – Local Government and Regional development, Labour and Social Affairs are involved in finance and employment issues.

The current Government's policy is for Norway to have a well functioning educational system and a creative research environment. It asserts that everyone in the country should have the opportunity to participate in - and influence the development of a knowledge society. The Ministry of Education and Research, together with the Directorate for Primary and Secondary Education, is responsible for implementing national educational policies so that a common standard is achieved through legislation and through an agreed national curricula, tests and examinations.

The Office of the County Governor represents central government in each of the 19 counties (with one County Governor's Office covering two counties). Each Office has an education department and a director of education who, in cooperation with the county and municipal authorities, checks that appropriate schooling is provided for young people in compliance with existing regulations. This Office is also responsible for ensuring that the provision of adult education facilities is adequate.

Over recent years considerable responsibility and decision-making authority has been delegated from the central government to county authorities and municipalities. Each school has a head teacher as well as various boards and committees. The heads and teachers are able to decide what learning materials to use and which teaching methods to adopt, subject to the framework of statutes, the national curriculum, tests and examinations.

2.6 Phases of education

Early childhood

The municipalities are responsible for overseeing the private day care institutions (offering 42% of places)[4] and for providing the public *Barnehager* – pre-school institutions with both educational and caring roles. A charge is made for this phase of education. According to Statistics Norway, by the end of 2003 48% of children aged 1 to 5 attended either private or public *Barnehager* full time and a further 21% attended on a part-time basis.

[3] In particular legislative circumstances the *Storting* divides into two chambers.

[4] In 2003 an amendment to the law permitted the Government to give national guidelines for fees and, since May 2004, a maximum monthly amount has been stipulated.

Primary and lower secondary

The municipalities are also – to use the term normally employed in Norway – the *owners* of the 3 300 primary and lower secondary schools catering for about 600 000 pupils and employing approximately 51 000 teachers. The years of compulsory schooling begin at age 6 and are divided into three phases: lower primary (grades 1-4); upper primary (grades 5-7) and lower secondary (grades 8-10). About 1.7% of pupils attend government-dependent private schools, where the government provides a subsidy of 85 % of the operating cost per pupil in public schools. Tuition fees are limited to the remaining 15 % of average cost. Less than 1% of pupils are educated in special schools.

Municipalities also have a legal obligation to provide special care facilities before and after normal school hours for pupils attending the first four grades of school. Parents are required to pay a fee for this service.

Upper secondary

Upper secondary education includes both general and vocational courses. The 19 counties are responsible for, and owners of, 398 upper secondary schools. In addition 61 schools are privately owned while the State is in charge of 3 schools. These schools employ nearly 27,000 teachers. Together with technical vocational schools, they cater for 179,000 students. Attendance at upper secondary school is voluntary and is completed by approximately 90% of the age group. Some 7% of pupils attend government-dependent private upper secondary schools.

Young people have the legal right to three years of education on a general course leading to higher education or to four years of education leading to vocational qualifications. Vocational courses usually consist of two years learning in school followed by two years' on–the-job training through an apprenticeship or other scheme. Entry to upper secondary schools may be postponed by up to two years and remains available for adults. There are also 77 Folk High Schools offering a year's boarding provision and specialising mainly in the arts, sport - including outside activities - media and information technology. [5]

Around 70 % of the cohort completes upper secondary education. Around 5 % never start, 60 % complete on time, another 10 % complete after two years, another 5 % are still at school 5 years after they started, 25 % have not completed and are not enrolled 5 years after they started.

Tertiary

Tertiary provision is located in 6 universities, 5 specialised university institutions, 25 university colleges, 2 specialist arts institutions and 30 small private colleges spread throughout the country. To gain entrance students need to have successfully completed upper secondary school or undertaken five years of work or a combination of the two. In addition adults over 25 may gain access through the recognition of non-formal learning. In 2002, tertiary education had been completed by 26% of those then aged between 50 and 54 and by 35% of those aged between 30 and 34. In addition, there are some private and public institutions referred to as 'institutions offering shorter courses of vocational post-secondary education'.

[5] Folk High Schools are mainly boarding schools owned and operated by a diversity of groups and bodies, ranging from Christian organisations to local communities and private foundations. Folk High Schools focus especially on the holistic development of personality and character of students. The schools offer general courses to young people and adults. Though the courses do not aim at formal examinations, they are meriting for entrance into institutions of higher education. http://odin.dep.no/ufd/engelsk/publ/rapporter/014001-220012/hov002-bn.html

Adult provision

Adult provision, consisting of both leisure courses and special courses designed for students who have not fully completed primary and secondary schooling, is offered by a variety of public and private institutions (including ordinary schools). In 2002, adult classes were taken by approximately 6% of 35 – 59 year-olds.

2.7 Recent educational reforms

Over the last ten or so years a number of important educational reforms have been introduced to the Norwegian education system.

Reform 94

In 1994 a reform of upper secondary education was launched in an attempt to increase participation in this phase of education. All young people between the ages of 16 and 19 who had completed the full course of compulsory schooling were given the statutory right to a further three years full time study in the upper secondary schools. At the same time, the number of foundation courses was drastically reduced and some of the barriers between the general education and the vocational courses were dismantled to facilitate transfers between the streams and progression from either stream into tertiary education. The reform also established a follow-up service for young people so that those neither working nor studying could be traced and counselled.

The reform of upper secondary education was evaluated in a major exercise lasting over four years.[6] The results showed some improvement in the progression and completion of courses by pupils following vocational tracks and better co-operation with employers and working life. It also showed an increase in the numbers entering tertiary education.

The evaluation also pointed to individual differences in the seeming success of upper secondary schools and the continuation within education of some 'drop outs' particularly amongst those following vocational tracks. The evaluators also drew attention to a drop in the numbers of adults engaged in school studies possibly caused by the introduction of a statutory right of young people to upper secondary schooling.

Reform 97

Reform 97 extended compulsory education from 9 to 10 years and changed the starting age from 7 to 6 years. It promoted a greater use of day-care facilities before and after school hours. It also provided a new curriculum (L.97) "based on the principles of community and adaptation to suit local and individual varieties and differences".[7] It consisted of a core curriculum for compulsory, upper secondary and adult education, a set of principles and guidelines for compulsory education and a set of subject syllabuses.

As with the earlier reform, a large evaluation programme was established.[8] This highlighted school differences in organisation, teaching methods and in the ways that bilingual pupils were treated. It

[6] Details of the evaluation can be found in the Country Analytical Report – CAR, Opheim, V. (2004) *Equity in Education- Country Analytical Report Norway. NIFU, Oslo*

[7] Royal Ministry of Education, Research and Church Affairs (1999) Curriculum *for the 10 –Year Compulsory School in Norway.*

[8] See Opheim, 2004, for full details.

concluded that the principle of '*adapted teaching*,[9]' which had been promoted by the reforms, had been implemented to a smaller degree than previously anticipated.[10] It also found that teaching had become too focused on the process of these activities, as opposed to their outcomes.

The Competency Reform of Adult Education and Training

This was launched in 1999 in an attempt to improve workplace skills and to promote lifelong learning. It provided resources for public and private companies to participate in some 700 competence building projects. It also led to the establishment of the Norwegian Institute for Adult Education (VOX) and to better assessment of the non-formal learning on-the-job of adults (*realkompetanse*). Furthermore the reform gives all adults the formal right to complete primary and secondary education if they have not already done so. The evaluation of this reform is still underway.

The Quality Reform in Norwegian Higher Education

This reform was introduced in 2003. It was designed to create a new degree structure in keeping with the Bologna Process[11] and new flexible, modular study programmes. It also created a Quality Assurance Agency (NOKUT), revised the system of financial support for students and promoted new approaches to teaching and assessment at tertiary level. This reform is currently being evaluated.

Equal education in practice

A strategic plan was launched by the Government in 2003 over a five year period to improve learning and increase the participation of those from ethnic minorities in day care and in schooling. This plan promoted the teaching of Norwegian to children and adults from minority communities. Like the reforms which have been noted earlier, this plan is currently being evaluated.

2.8 Ongoing educational reforms

2004 Report to the Storting

In spring 2004 the Ministry of Education and Research presented a Report to the *Storting* entitled '*Culture for Learning' (Report No. 30)*[12]. This White Paper laid out a plan to ensure that future generations of Norwegian children are adequately prepared for the challenges they are likely to encounter in their lives. One of the key ideas is that *"schools ...must be learning organisations able to teach pupils to learn"* and stimulating them to continue on a path of life-long learning[13]. The White Paper stresses that the way to ensure equity might be to permit schools to vary the way that they treat their pupils by adjusting the teaching to their particular needs; in other words, to increase the level of *adapted learning*. *"National*

[9] Adapted education is described in the curriculum: "In order to meet pupils' different backgrounds and abilities, the school for all must be an inclusive community with room for everyone. The diversity of backgrounds, interests and abilities must be met with a diversity of challenges, suitably adapted education is a necessary and prominent principle in compulsory school." *Principles and Guidelines for Compulsory Education,* Ministry of Education, Oslo.

[10] See Haug, P. (2003) Evaluering av Reform 97. Oslo, Norges forskningsrad.

[11] See European Commission Education and Training website for a full discussion - http://europa.eu.int/comm/education/policies/educ/bologna/bologna_en.html

[12] Ministry of Education and Research (2004) Report no 30 to the Storting (2003 – 2004) *Culture for Learning* Abridged English Version.

[13] Ministry of Education and Research (2004) Report no 30 to the Storting (2003 – 2004) *Culture for Learning* Abridged English Version. P1.

authorities must allow greater diversity in the solutions and working methods chosen, so that these can be adapted and customised to the situation of each individual pupil, teacher and school."[14]

Some of the specific recommendations involve working with parents through the use of what is to be called 'The Quality Framework'. "The Quality Framework" is intended to clarify what is the responsibility of the school, as this was not clear before (and thus responsibility for the students' learning was "shuffled" between the school and the parents). The curriculum is centrally determined, but schools may alter 25 % of teaching time in order to allocate time more efficiently to individual students, so that they can reach the targets of the curriculum. The reallocation of teaching time is based on the needs of the individual student, in agreement with the parents and/or the student. Other proposals are designed to increase co-operation with the business community and to focus more on entrepreneurship; to lengthen the school day; to rationalise programmes in upper secondary schools; to maintain the right of pupils to special education; to strengthen the work on pupil behaviour and bullying; and to increase funding for research into these areas.

A main thrust of the ongoing reforms is to change the orientation of public debate about the education system from one to do with *inputs* (how many pupils are there? how much public money is invested?) to one more concerned with *outcomes* (what have pupils actually learned?). The White Paper, therefore, spells out what is expected of each pupil in terms of speaking, reading, writing, arithmetic and information and communication technology skills. New subject curricula are to be formulated as competence goals for the student, facilitating the assessment of the competences achieved.

National testing

Independently of the White Paper, it had been decided to introduce a system of national testing, In the first year (2004) the testing was limited to pupils in grades 4 and 10, for practical reasons. Testing covers four subjects: reading, writing, English and mathematics. All results are published on a dedicated website – the '*Skoleporten*.'[15].

The results for each school from the first round of testing have already been published. According to the Norwegian Ministry of Education the purpose of the site is to:

> *"present various types of data from the individual schools and school owners, in addition to informational resources for interpretation, assessment and development work in primary, lower secondary and upper secondary education. This is a tool that school owners and administrators can use in various ways to assess and develop their work. Decision-makers in the education sector are the primary target group, but skoleporten.no also provides useful information for parents, pupils and other interested parties.*
>
> *Skoleporten.no contains 374 different indicators covering everything from the number of PCs connected to the Internet to what the pupils think about the toilets and bathrooms. Information is available on all the primary, lower secondary and upper secondary schools. In addition to factual information, it is also possible to find information on topics such as the learning environment, results and resources."*

We will discuss the impact of *Skoleporten.no* and the issues it involves later in this note.

[14] Utdannings Og Forskningsdepartmentet Report no 30 to the Storting (2003-2004) Culture for Learning http://www.odin.dep.no/ufd/engelsk/publ/veiledninger/04507–120012/dok-bu.html

[15] Skoleporten.no. The English version is not yet available.

The next section addresses the question of how much equity exists in the current Norwegian system of education**.**

3. HOW MUCH EQUITY CAN BE FOUND IN THE CURRENT SYSTEM?

Norway has been a world leader in its approach to equity in education. Despite its challenging geographical conditions and the sparsity of its population, the country has established comprehensive schooling and tertiary systems for all its population. As noted by Teichler (1988) schools are comprehensive – accepting almost every child in the age-cohort- use few streaming or tracking devices, adopt selection procedures relatively late and offer few 'dead ends'.

Drawing on the framework being used in the OECD thematic review on equity in education, it is possible to evaluate the effectiveness of the country's policies which address equity.

3.1 Funding

The block grant

Central government provides the majority of funds for primary and secondary education to municipalities through a 'block grant'. This provides for a range of services delivered by municipalities including health and social services alongside basic education. The block grant is determined by a numerical formula which takes account of such factors as the size of the population - including the numbers of those of school age - and the extra costs of delivering services in sparsely populated areas.

Municipalities have discretion over what proportion of this expenditure to devote to education. Whilst, in principle, this might lead to under-provision in some municipalities, we understand that, in practice, this risk is limited by the fact that education tends to be a local political priority and by the legal requirement on municipalities to deliver education services of *adequate* quality.

The block grant, however, does not provide for the additional costs of educating immigrant children. The expenditure involved here is met through separate ear-marked grants providing resources for both additional teaching of Norwegian and for mother-tongue teaching. These grants provide for around 50% of the costs of such provision; a figure which, we have been told, has fallen from one closer to 90% some years ago. This means that quite significant additional costs fall on those municipalities with significant numbers of immigrants, these additional costs neither being met by the block grant nor through the ear-marked funding.

We have been impressed with the Norwegian emphases on equality and fairness. We have also noted that when municipalities are seeking to balance their budgets they sometimes have to choose between competing priorities – such as education or care of the elderly. How frequently such situations occur depends on a number of different factors: the level of income able to be raised through local taxes; the nature of the block grant settlement from central government; and the nature of the population in terms of its special needs.

Resourcing the education system

Norway traditionally funds its education system at a generous level (see Table A3.1). Its expenditure on primary schools per student is nearly 50% more than the OECD average and in the OECD is second only to Denmark. Expenditure per student on both lower and on upper secondary is 47% above the OECD average and is considerably greater than that of Denmark, Finland or Sweden. The figure for expenditure on tertiary education is also high - 40% above the OECD average but rather smaller than that of Sweden.

Use of resources

As in most countries the proportion of teachers to pupils determines much of the actual cost of the education system.

Norway has low (generous) ratios between its pupils and its teachers in all three phases of education. Only Denmark has a lower ratio in its primary phase. In each case, the Norwegian ratios are considerably more generous than the OECD averages (see Table A3.2). Norway is a wealthy country and salaries are generally high. However, teachers' salaries are proportionately smaller than in all the other Nordic countries and the OECD average (when compared with those of other professions using a measure based on the ratio of salary to GDP per capita); although they are quite comparable, in absolute terms, to teachers' salaries in many of the OECD countries (see Table A3.3). At the same time, no particular recruitment difficulties to the teaching profession were noted during our visit although current reform efforts, which increase the requirements on those entering the profession, may cause problems to occur in the future.

3.2 Selection and access

Pre-primary

Norway has established extensive provision for pre-primary children - Early Childhood Education and Care (ECEC). Traditionally this provision is found in *Barnehager*. National regulations covering staffing ratios, staff training needs and educational and care objectives are set out in the *Barnehager* Act of 1995. *Barnehager* display great diversity in ownership, modes of operation, opening hours and educational, ideological or religious orientation or profile. All *Barnehager* receive a state grant. The private owned institutions receive more than the public *Barnehager*, to compensate for the fact that the municipalities contribute less to the funding of private institutions compared to the municipally owned *Barnehager*. *Barnehager* fees are limited to a maximum figure imposed by government. 72% of all children aged 1 to 5 were in *Barnehager* at the end of 2004. The corresponding figure for children with minority backgrounds was 58%.

Formally there is no form of selection applied by the owners of *Barnehager*. In practice, careful consideration is given to applications from the parents of profoundly or multiply disabled children, in order to ensure that the institution will be able to offer reasonable provision.

For the youngest age groups, it was suggested to us that one reason for the lower participation rate of children from minority groups might be the existence of *the cash benefit scheme.* This scheme transfers cash to the parents of children between one and three who make very limited, or no use, of pre-primary provision or subsidized day care. In August 2004 the full rate was set at NOK 3,657 (approx. EUR 457) per month. Its intention, according to the Ministry website is to "help parents to spend more time caring for their own children and to give them genuine freedom of choice as regards type of care for their children. This benefit is also designed to bring about greater equality in the transfers the individual family receives from the State for childcare, irrespective of the childcare arrangements made by the parents".

As Opheim (2004) indicates, the cash benefit scheme is controversial. It does provide a financial incentive for parents to keep their children in the home or with close relatives during their early years. Moreover this financial incentive will have more weight (relative to other sources of income) in poorer households – an unfortunate effect given evidence that good quality early childhood education and care is particularly beneficial in such households. Additionally in poor immigrant families where the children are not fluent in the Norwegian language, the effect of the incentive may be to inhibit the rapid integration of immigrant children into school and early learning opportunities.

The cash benefit scheme has been evaluated by several projects The evaluation website is in Norwegian: (see http://program.forskningsradet.no/vfo/nyhet/nyhet069.php3) We understand that the main conclusion is that introduction of the cash-benefit did not, in general, cause appreciable numbers of parents to stay at home with their children. However there has been a small, negative effect on women's working hours.

We were informed of a 2001 research study which showed a small reduction in the use of ECEC amongst children aged one and two with background from Pakistan, Somalia, and Vietnam. The survey is based on interviews with 443 families with small children with an ethnic background from Norway, Pakistan, Somalia and Vietnam, living in the counties of Oslo and Akershus. (FAFO, Report 349, 2001.) The relevant ministry has initiated a project this year to obtain more information about the use of the cash benefit and of ECEC institutions amongst the minority families.

There do, therefore, appear to be some problems of access to the pre-primary phase of education. For all age groups, the cost of provision may prevent some of the less well off families from using it and, for the youngest age groups, the cash benefit scheme may discourage a number of poorer and immigrant families from taking advantage of this phase of the education and care system.

These effects are unfortunate, since there is abundant evidence of the benefits of early education and care on subsequent development, particularly for disadvantaged groups. For example, evidence from recent English longitudinal research, comparing the long-term development of children who had experienced a variety of pre-primary experience, including staying at home, has demonstrated that pre-school educational experience greatly encourages subsequent positive intellectual development (Sammons et al, 2002). Furthermore, the research study illustrates that disadvantaged children particularly benefited from pre-school experience: "*It was found that children who are multiply disadvantaged (in terms of a range of child, family and home learning environment characteristics) show much better attainment than similarly disadvantaged children in the home sample at the start of primary school." (Page iii).* The study therefore emphasises the importance of the pre-primary phase for the development of system-wide equity.

Primary and lower secondary

As already noted, Norway has a comprehensive system of schooling. Children have a right to attend their local school, and there is very little competition for entry to particular schools. It has developed universal country-wide coverage of schooling and we were frequently told that it has largely removed rural/urban differences in the quality of provision. The effect of offering local schools to local people in a mainly rural country is that many schools are small (in 2004, 36% of primary and lower secondary schools, containing 9% of the pupil population, had less than 100 pupils).

There is a further problem, however, in relation to access. Some new immigrant adults may not have completed primary schooling and will need, if possible, to complete suitable courses so as to equip themselves for life in their new country. In adult education, while teaching is supposed to be adapted to individual needs (in terms of time, length and content), and adults are not generally expected to attend

ordinary classes with younger pupils in primary and lower secondary education, we understand that this occasionally takes place.)

Special schools have largely been abolished and over 99% of the age cohort are now educated in ordinary schools. There is no selection apart from the consideration of whether the school can provide a reasonably adequate service to a child with profound or multiple disabilities.

In summary therefore, access to the 10 years of compulsory schooling from age 6 to age 16 (increased from 9 years in 1997) appears to be excellent for Norwegians. We have some concerns, however, over the more limited opportunities for access for recent immigrants.

Before and after school provision (Skolefritidsordningen, SFO)

All municipalities are required to offer day-care facilities, and due to the demand from families, provision has grown rapidly. Because of relatively short school hours (mainly mornings only), some children spend a high proportion of their daily lives in SFO care. We did not have the opportunity to consider SFOs in detail but we understand from the OECD 1999 Review that many of their staff have had little training and that there are no national regulations governing this type of provision. Reliable quality, as much as access, may therefore be the key issue.

Upper secondary

Norway offers all young people who have completed compulsory education the right to free study for three years in its upper secondary schools. The creation of comprehensive institutions offering equally respected strands of courses in general academic studies and vocational/technical fields side by side often in the same building is a major achievement. Furthermore the existence of connecting routes between the two strands - designed to mitigate the impact of a wrong choice by a student – is extremely helpful. This and the ability to allow students credit for what they have studied in the alternative strand of courses, and thus remove the all too commonly found *dead ends,* is exemplary.

Selection of students is undertaken by the school owner. This is only possible in areas where more than one upper secondary school is actually available to families. Not all counties allow students to choose a school – some simply allocate students to the nearest school offering the chosen programme. Some schools endeavour to operate on a community basis accepting all qualified applicants within their area.

Access to this phase of schooling appears to be generally very good. In 2002 about 80% of the cohort were in upper secondary education (43% of young people aged 16 to 19 were participating in vocational/technical courses and approximately 35% of them were involved with academic courses). There was virtually no difference in participation between girls and boys though girls were more likely to be in general academic rather than vocational courses. There was only a small urban/rural difference in rates of participation but a larger difference between the fuller participation by children of parents who had experienced tertiary education and the rate of those whose parents had only undertaken primary schooling (80% compared to 67%).

Interestingly, there was a relatively small difference between the participation of children with both parents born in Norway (80%) and those born in Norway but with two foreign born parents (73%). In contrast, the group of first generation immigrants without Norwegian background had a participation rate of only 53%.

Tertiary

Since the expansion of higher education in the 1970s, efforts have been made to ensure geographical accessibility for all citizens. Today, higher education - in the form of universities or university colleges - can be found in each of the 19 counties. Access to higher education is normally based on general qualifications. Successful completion of three years of upper secondary education comprising defined core subjects. Persons at the age of 23 with five years of working experience or schooling may also be admitted, but only if they also cover the same core subjects. From the age of 25, access may also be granted on the basis of non-formal qualifications related to study programme. Students are selected on a competitive basis employing the examination results from their upper secondary school courses. Military service or attendance at one of the folk high schools also provides credits for higher education. Individual institutions are permitted to admit students up to a centrally imposed limit. These students are selected on a competitive basis using the examination results from their upper secondary school courses.

There are no fees in public tertiary institutions. Private colleges obtain some state funding but also charge fees. In 2002, 24% of 19 to 28 year-olds participated in some form of tertiary education – more than double the figure of 20 years ago. Norway also has a relatively large proportion of students studying abroad (6.3% of all Norwegian students in 2002).

In Norway, student aid consists of a mix of grants and loans to cover costs of living. Tuition fees are not charged by public institutions. Loans are not means-tested, but are subject to a ceiling. Grants are means-tested, and may be reduced if the student receives social benefits, possess substantial assets or earn more than NOK 113,027 per year (figures for 2006). Loans are interest-free during the study period and all students are entitled to financial aid for a maximum of eight years. Initially, the basic amount is given as a loan but, upon completion of studies, part of it is converted into a grant (to a maximum of 40%) - the actual proportion depends on students' success in completing their studies. Students living with their parents are not entitled to grants but may receive loans. Loan repayments are not contingent upon individuals' earnings. Most private institutions charge tuition fees, for which support is available in the form of additional loans subject to a ceiling. Other benefits are provided such as grants for students with children and travel support.

Today there are few urban/rural differences in participation rates. But, as in many countries, a much higher proportion of students come from families where both parents had also experienced tertiary education (40% of such young people attend tertiary institutions) than where one or both of them had only experienced primary schooling (only 8% of young people from these families). There is, however, only a small difference between students from families with Norwegian backgrounds and those from first generation Norwegian ones. Interestingly, the highest proportion of students participating in tertiary education comes from families where both parents were born abroad in other western countries and who, perhaps, represent new global citizens.

A number of special projects have been established in order to encourage the recruitment of students from ethnic minorities into particular universities and university colleges. Oslo University is also seeking to increase the proportion of students it currently recruits from ethnic minorities. Currently 12,3% of students at the University of Oslo have a minority background compared with 33,8% of pupils in Oslo schools (primary and lower secondary) have a minority background (2004 figures), (The University of Oslo takes students from the whole country, and not only from Oslo.

Access to the tertiary phase of education appears, therefore, to be reasonably good but with some adverse features. Representation from some minority groups is poor and the gender difference in participation rates is sizeable. In the cohorts leaving upper secondary school, 27% of girls currently participate in higher education as opposed to only 20% of boys. We were told that this difference is partly

the result of young men choosing to enter well-paid trade occupations at age 19 rather than incur debt keeping themselves through the years of tertiary education.

Disability

A Report to the *Storting* on the recruitment of people with disabilities - *Focus on Human Dignity – Plan of Action for Human Rights* deals with the question of access for those working within the education system. We were not able to study in any detail the position of pupils with disabilities but were assured that the almost complete integration of pupils with various special needs - although providing challenges for teachers - was generally seen as the appropriate way for schooling to be organised.

Adult learning

Norway has been particularly active in the field of adult learning since the beginning of 2000. The Norwegian Competence Reform (1999) was passed to expand learning opportunities for adults and develop a lifelong learning strategy. Since then, a number of measures have targeted disadvantaged adults. The right to upper secondary education was established in 2000 and the right to basic education in 2002. Thus, at present, adults seeking to complete primary or secondary schooling are formally entitled to do so and can benefit from public financial support in the form of loans and grants. Municipalities are charged with providing facilities for them but we understand that, in reality, not all local authorities provide tailor-made courses to suit adults. In some cases the only opportunity to study may be to sit in with more youthful pupils undertaking the relevant grade in regular education institutions. This may be inappropriate for adults and is likely to inhibit the take up of a positive legal right to make up for lost schooling. This lack of practical opportunities reveals themselves in the data. According to the Norwegian CAR, by October 2002, only around 3 700 persons received this kind of education, although it might be too early to know about the results of this recent measure.

One recent reform is intended to help those with low education attainment, such as people who have difficulty in documenting their formal education and/or job experience, including immigrants. This has been the development of national systems for the documentation and validation of non-formal and informal learning. Adults born before 1978 have the right to have their non-formal learning validated for admission to upper secondary education and higher education. Universities and colleges also allow admission to persons aged over 25 with no upper secondary education if their real competence for the course in question is approved. The validation of non-formal learning can lead to further education, or provide a competence certificate acceptable in the labour market. In the initial pilot programme (1999-2001), 10 000 persons had competences validated in upper secondary education while in 2003 alone, 24 000 people took part in the testing.

For workers, there may be two types of opportunities available. First, employers provide learning opportunities at the work place. Second, there is the right to study leave to attend an educational institution. This right is also available for workers who want to take the opportunity to study full time and can get financial support to do so[16]. Around 17 000 to 18 000 employees exercised this right to full education leave in 2003 and whilst less than 50% of them received full pay while studying, 20% received reduced pay.

Adult learning also includes a number of courses designed as leisure activities. For instance there are over 20 Study Associations (*Studieforbund*). According to *Statistics Norway*, these associations arranged 50 000 courses attended by over 735 000 participants in 2003 alone. There are also 12 authorized distance education providers. In 2003, these provided courses for approximately 20 000 participants.

[16] NOK 80 000 per year: 60% loan, 40% converted from loan to grant upon passing examination.

With an increasing immigrant population in Norway, accounting for 7.6 per cent of the total population in 2004, access to the Norwegian language is becoming a necessity for the appropriate integration of adults. Overall, there appear to be opportunities to learn available throughout Norway. There is an introductory Norwegian language and civilization training which the municipalities are responsible for providing for adult immigrants. Participants who have primary or secondary education can obtain up to 850 free lessons (level A). Participants who have less than primary or secondary education can receive up to 3 000 free lessons (level B).[17]) By October 2003, there were approximately 16 700 in level-A training and approximately 13 700 in level-B training) (Opheim, 2004).

For refugees and asylum seekers, the situation is changing. The right to Norwegian language and social studies for asylum seekers was removed in January 2003. New plans to introduce a different system from January 2005 make compulsory for all adult immigrants and refugees 300 hours of language training in order to obtain a settlement permit and Norwegian citizenship. For those who want and need more language training, the municipalities will be obliged to offer up to 3 000 hours of free lessons (NIFU, 2004).

Overall, access to adult learning appears somewhat mixed. In principle the system appears to have a range of opportunities in place, especially for low skilled and disadvantaged adults. These include the right to learning and financial support to do so, but in some parts of the country there may be practical obstacles, such as lack of supply, which may inhibit some people, especially older people from participating. For immigrants, there seem to be opportunities for Norwegian language training available, although we are not clear as to the availability of courses for all those who would require it.

Linguistic barriers

Some pupils are not fluent in Norwegian when they enter school, and 5.9 % of all pupils receive additional training in Norwegian. (About 50 % of these pupils are also given education in their mother tongue or first language.) This is intended as a temporary arrangement prior to acquiring full fluency in Norwegian. However, a research study by Lodding (2003 cited in CAR) has shown that over a ten year period 20% of the pupils with immigrant backgrounds never graduated from this course. We believe that the city of Oslo is considering abolishing the course on the grounds that rather than supporting access to the full curriculum it actually serves as a barrier to it, although the city will continue to provide some additional training in Norwegian.

Currently earmarked funding provided by central government is used to support the teaching of the mother tongue. (We understand that in 2002 15% of all immigrant pupils aged 6-15 received such tuition[18].) At the same time, we believe the Government wishes to increase efforts to ensure that all pupils acquire fluent Norwegian. This is a sensitive matter and experts in language learning are divided as to the relative merits of the different approaches to gaining full literacy. Municipalities have, since 2004 had increased flexibility in how they choose to provide suitable language tuition. The municipalities were earlier obliged to provide pupils who have a mother tongue other than Norwegian or Sámi with special education in the Norwegian language, bilingual subject instruction *and* mother tongue tuition until they had acquired the proficiency enabling them to follow normal teaching. Now, the pupils have the right to special education in Norwegian language, and *if necessary* education in bilingual subject instruction or mother tongue tuition, or both.

We understand that changes in policy are driven by a firm desire to ensure that all citizens can play a full role in Norwegian society. Employers have used a variety of devices in order to encourage their

[17] See(http://www.ssb.no/english/subjects/04/02/20/grsvo_en/fig-2003-06-13-01-en.html

[18] Statistics Norway, 2003b – cited in the CAR.

employees to improve their competency in Norwegian. Furthermore we have noted the obligation for new entrants to undertake a minimum course of language training prior to gaining citizenship. However, the removal of language tuition for asylum seekers over 18 awaiting a decision on their right to remain in Norway is viewed with dismay by some minority groups. The government view was that they wanted to give priority to and improve the language teaching for those who had a wish to stay in Norway on a permanent basis.

Our view is that the Norwegian approach to language policy overall is generally practical and consistent. We support the effort to ensure the fullest access to learning. We suggest, however, that the policy is kept under review and that it be amended in the light of any compelling linguistic evidence about the benefit of mother tongue teaching. Furthermore we commend the practice of using teachers fluent in the mother tongue of pupils in the teaching of Norwegian as a second language. We have noted the existence of a special course designed to provide a qualification for teachers from ethnic minorities in order to increase the availability of qualified staff. Finally, we urge caution in implementing the removal of language tuition for asylum seekers, given the length of time that the processing of applications can take.

Guidance and counselling

All students in upper secondary schools are offered the opportunity to receive counselling for any learning, social or psychological difficulties. Another part of the counselling service provides careers advice and has the duty to follow up those students who drop out of their studies. We understand that there has been criticism of this service and that some reorganisation is underway in order to increase its efficacy. We consider that the principle of having a statutory duty to follow up students who drop out is excellent.

3.3 Concluding comments on selection and access

We are generally very impressed with the level of access to the education system offered to Norwegian citizens. We have drawn attention to some problems of access for new citizens and immigrants. The most serious problems seem to us to occur in the pre-primary and adult sectors. Primary, lower secondary, upper secondary and tertiary provision appears generally to offer fair and reasonable access to students no matter their family background. We have not visited any Sami schools or its University College so are not in a position to comment on the equity of access or selection but we were assured by a representative of the relevant ministry that sufficient provision exists.

With regard to selection, we were impressed with how little selection is used within the Norwegian system. Where selection is used – as in applications for upper secondary schooling, apprenticeships and tertiary education it appears to be operated on the basis of fair competition. Competition always provokes tension when there are more applicants than places for any form of provision but, since this issue was hardly raised by those we met, we conclude that, in general, it is not seen as a major source of stress in the Norwegian system.

3.4 Transitions

Home to early childhood education and care (ECEC)

As in all countries, the transition from parental home to the care afforded by the *Barnehager* needs to be handled with great care and this seems to be the case in Norway. 2.4 % of children under age one attend *Barnehager* (2003). About 40 % of these children attend less than 41 hours per week.

ECEC to lower primary schooling

We found no evidence of problems affecting children as they moved from *Barnehager* to primary schools. Rather we were told of the difficulties faced by children who, for whatever reason, had no ECEC experience and who had to adapt life outside the home. As noted, such difficulties could be exacerbated if the child was unable to communicate in Norwegian (see our comments on the cash benefit scheme).

Upper primary to lower secondary schooling

The transition from upper primary to lower secondary is not generally regarded as difficult. In some municipalities the two forms of schooling are actually combined in one institution.

Lower secondary to upper secondary schooling

This is likely to be the most dramatic transition in a Norwegian school pupil's experience. The move is likely to encompass a series of choices – of both schools and courses within schools; a longer journey, a change of building, new companions and different teachers with possibly a different approach to learning. Students have the right to obtain one of the three courses/programmes of study (not schools) to which they apply. Counties decide whether students should be allowed to apply also for schools (in a combination with programme), otherwise the county allocates them to the nearest school offering the programme. To make the process more manageable for pupils and schools alike the process is administered through an 'application office' run by the county authorities. Last year 76% of applicants obtained their first choice, and 61% obtained their first choice of both programme and school. It therefore appears that few of the tensions that so often accompany competition for places in other countries can be found in Norway.

The transition points do reveal some potential weaknesses in the system. For example – it was reported to us that there was a lack of qualified advice available to some pupils before they chose their upper secondary courses. The result of this is that some pupils choose inappropriate courses and waste the time of themselves and their teachers.

Second chances

Unlike some other OECD countries Norway does not have a tradition of keeping back pupils if, at the end of the school year, their progress fails to reach a particular standard. Partly this may be because of a lack of nationally agreed standards though it is also a reflection of the concern for equity that traditionally is part of the Norwegian system.

As noted above, drop-out remains a problem - 25 % have not completed and are not enrolled 5 years after they started in upper secondary education. As part of the Norwegian government's action plan to help the poor, there has been a new initiative to reduce drop-out ("Satsing mot frafall" – "*Reducing drop out"*). The Follow-up Service's work on the drop-out rate in upper secondary education has been reinforced, with cooperation between the counselling service and the Norwegian Directorate of Labour playing a key role. A pilot project was initiated in 2002 in four counties, and has been a national project since 2004 with all counties taking part. The project includes all pupils at risk of dropping out, but special attention is given to youth with immigrant background and students with special education needs. An educational programme on providing guidance to minority language pupils has also been compiled for counsellors working in all parts of the school system, and for the Educational-Psychological Services, the Follow-up Service and the Norwegian Directorate of Labour.

Pupils who select a general course in upper secondary schools can later opt for vocational training and gain practical experience. (Students may switch between general courses and vocational training provided

that upper secondary education is completed within five years.) Those who have completed a vocational strand may also choose to take extra courses to obtain entry to tertiary education.

Furthermore, Norway has developed – and continues to modify – a full and part-time adult education service which offers routes to completion of primary and secondary schooling with some financial support and the possibility of recognition of prior and work-based learning as qualifications. There are also opportunities for immigrants to take Norwegian language and culture courses. However, overall, the availability of these courses remains somewhat unclear, depending much on the circumstances of each municipality and on a wide range of different suppliers.

3.5 International comparative measures of literacy, maths and science skills

At school level, the main data available to us are the results of the 2003 PISA Tests (Programme for International Student Assessment) and those from the 2003 TIMSS assessments (Third International Mathematics and Science Assessments). In order to evaluate the Norwegian results in a suitable context we have compared – wherever possible - national results with those of three other Nordic Countries (Denmark, Finland and Sweden) and with the average of all the participating countries. In making this choice, we have noted that Nordic countries share many broad features – including a strong commitment to equity and to education within relatively stable and cohesive societies. The main difference between Norway and other Nordic countries lies in its affluence, which also distinguishes it from most other European countries. In dealing with the TIMSS tests, in which fewer Nordic countries participated, we draw on the international benchmarks provided by TIMSS and on the results from countries performing particularly well and particularly badly in order to illustrate the range of scores that young people can achieve.

PISA

The Programme for International Student Assessment (PISA) was designed by the OECD, in collaboration with its member countries, in order to create a set of instruments to measure how well young adults, nearing the end of their basic schooling, could cope with the *"challenges of today's knowledge societies."*[19] The tests focus on tasks that 15-year -olds should be able easily to undertake in the three domains of reading, mathematics and scientific literacy.

The results are discussed below and the data are provided in the appendix. Data are generally only shown for the latest year – 2003. Many of the differences between Norway's scores in 2000 and 2003 are small and not statistically significant evidence of trends in performance. One exception to this is reported below. In all PISA tables, the Norwegian results are shown alongside those of Denmark, Finland and Sweden.

Reading literacy

The sample of Norwegian pupils had an average score of 500 points, just above the OECD mean of 494 points, in 2003. The scores of comparable samples in Finland (543), and to a lesser extent Sweden (514), were considerably better; those of Denmark (492) were worse (see Table A3.4).

The size of the standard deviations illustrate that the spread - or dispersion - of the scores in Norway was slightly greater than in the other Nordic countries. Some of that dispersion was caused by the proportion of girls who are performing very well (at level 5) in the PISA reading literacy test[20]. This

[19] OECD (2001), Knowledge *and Skills for Life: First Results from PISA 2000*, Paris, p14.

[20] Level 5 proficiency indicates that the capability of "completing sophisticated reading tasks, such as managing information that is difficult to find in unfamiliar texts; showing detailed understanding of such texts and inferring

percentage of Norwegian girls is considerably bigger than in the OECD average. It is smaller than Finland and, to a lesser extent Sweden, but is considerably bigger than that of the Danish sample (see Table A3.5). The proportion of Norwegian boys, as with boys in most countries, was markedly smaller, thus illustrating the generally superior reading skills of girls. Norwegian boys just exceed the OECD average at level 5. Like their female peers, the Norwegian boys perform better than in Denmark but worse than in Finland and Sweden (see Table A3.6).

At the lower end of the range, some pupils failed to reach level 1, or only just reached this level. These pupils are demonstrating their lack of literacy skills.[21] There were just over 11% of Norwegian girls in this category. This was lower than Denmark but much higher than Finland and Sweden. As much as a quarter of the sample of Norwegian boys only reached this level. These were the worst figures amongst the Nordic countries and were only slightly higher than the OECD average (see Tables A3.7 & A3.8).

One way of examining the relative equity of the results is to look at the size of the 'gap' between the country average score and the achievement level below which 5% of the scores of the country's sample pupils are found. If this gap is large then it means that the underachievers are lagging particularly far behind their 'average' counterparts. When we undertook this analysis we found that the Norwegian sample had a sizeable such gap - considerably bigger than the other Nordic countries and slightly bigger than the OECD average (see Table A3.9).

In order to provide a fuller picture, we examined another measure of spread - the gap between the 75th and 25th percentiles, comparing the quarter of the population who perform best in the test and the quarter of the population who do the least well (see Table A3.10). This measure shows that, overall, the difference between the country with the smallest gap or disparity and the one with the largest is only 48 points. The country with the smallest gap is Finland (also the country ranked 1st in reading with a mean score of 543) and the one with the most disparity is Germany (ranked 21st with a mean score of 491). Norway is ranked 22nd with a measure of disparity just bigger than the OECD average.

3.6 Norwegian standards in reading literacy

Norwegian pupils at age 15 are performing at about the average for the OECD as a whole. Their performance is less satisfactory than two of the three Nordic countries that have been used in comparisons: Finland and Sweden. As in most countries, reading appears to be more of a problem for boys than for girls but, in Norway, boys perform particularly badly. These results must be disappointing for all involved with the Norwegian system given the amount of resources invested in it. However these results only reflect achievement relative to other countries at age 15. Unfortunately there are no longitudinal surveys to examine how reading skills change over time. There is, however, a survey of adults and its results will be considered later in this section.

In terms of equity, the Norwegian system appears to perform at about the average for the OECD countries. This is somewhat surprising given the emphasis which has been placed on this goal within

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which information in the text is relevant to the task; and being able to evaluate critically and build hypotheses, draw on specialised knowledge, and accommodate concepts that may be contrary to expectations" OECD (2004) :Learning for Tomorrow's World: First Results from PISA 2003,Paris, p276.

[21] "Students performing below level 1 are not likely to demonstrate success on the most basic type of reading that PISA seeks to measure. Such students have serious difficulties in using reading literacy as an effective tool to advance and extend their knowledge and skills in other areas. Students proficient at this level are capable of completing only the simplest reading tasks developed for PISA, such as locating a single piece of information, identifying the main theme of a text or making a simple connection with everyday knowledge." OECD (2004) Learning for Tomorrow's World: First Results from PISA 2003, Paris, p279.

Norwegian society but, again we would urge caution in drawing conclusions until the results of the survey of adult reading skills have been presented.

Mathematical literacy

In the mathematics test, Norwegian pupils achieve lower scores (495 points) than the other Nordic countries and the OECD average (500 points – see Table A3.11). Unlike the reading measure, the spread (standard deviation) is smaller than that of the OECD indicating less disparity in the scores. More boys than girls are high achievers but the proportions reaching this standard are about half the level in Finland and considerably smaller than all the other countries shown and the OECD sample (see Table A3.12).

At the least successful level of the mathematics assessment, Norwegian pupils appear in the same proportions as the OECD average – about one in five of the sample. This is rather more than in Sweden or Denmark and considerably more than in Finland (see Table A3.13).

In Norway the gap between average performance and that of the lowest 5% exceeds that of all the Nordic countries and is just above the OECD figure. This illustrates that the underachieving tail is further away from the performance of the average in Norway than in its Nordic neighbours (see Table A3.14).

The IEA TIMSS studies

The International Association for the Evaluation of Educational Achievement (IEA) is an independent, international cooperative of national research institutions and governmental research agencies. Its primary purpose is to conduct large-scale comparative studies of educational achievement with the aim of gaining a more in-depth understanding of the effects of policies and practices within and across systems of education.[22] Unlike PISA, which endeavours to be independent of country's curricula, items in TIMSS tests are more likely to be related to national curricula. The two sets of tests, therefore, are quite different and seek to measure different aspects of pupils' knowledge and skills.

TIMSS studies in mathematics and science have taken place in 1995, 1999 and 2003. They examine the performance of samples of 4th and 8th graders. Unfortunately, Sweden is represented in only one of the grades and neither Finland nor Denmark participated at all. Norway, however, can be found in both. Looking at the data for the latest year (2003) it is possible to compare Norway and Sweden (although Sweden has data only for Grade 8 pupils) with the international average. In order to illustrate the range between countries with the highest and lowest results data from the Singaporean and South African sample have also been examined.

The Norwegian sample achieved a score of 461 points - much better than the South African (264 points), but lower than the Swedish (499 points) and much lower than the Singaporean samples (605 points). It also performed slightly less well than the international average (467 points). In each of the results, girls exceeded or matched the results of boys which contrast with the direction of the PISA outcomes (see Table A3.15).

Looking at the benchmarks created by TIMSS, we found that only 10% of Norwegian and 2% of the South African pupils reached the levels of *Advanced* or *High achievement* in comparison to 24% of the Swedish sample and 77% of that from Singapore. This is well below the international average of 23%. In

[22] Since its inception in 1958, the IEA has conducted about 20 research studies of cross-national achievement. The regular cycle of studies encompasses learning in basic school subjects. Examples are the International Mathematics and Science Study (TIMSS), and the Progress in International Reading Literacy Studies (PIRLS).

terms of the lowest achievement benchmark, Norway again performs less well than Sweden or Singapore though it does exceed, on this measure, the international average and the South African figure.

In the Grade 4 TIMSS, Norwegian boys perform slightly better than girls but both fall below the international average and considerably below the Singaporean sample. Norway has 10% of its sample reach the Advanced or High benchmark in comparison to only 1% of the Tunisian sample (the country performing least well at Grade 4), 33% of the international average and 73% of the Singaporean sample. At the other end of the range 75% of the Norwegian sample reach the low achievement benchmark in comparison to 28% of the Tunisian, 82% of the international average and 97% of the sample from Singapore (see Table A3.16.).

In order to provide a fuller context on the equity of achievement reached by Norway, we also examined the gap in achievement between the 75th and 25th percentiles in the mathematics assessment - a measure which indicates the size of the disparity between the most able and those with the most difficulties – for all the OECD countries. This analysis, which focuses on the middle 50% of the distribution of pupils, shows that the range between the country with the smallest disparity and the one with the largest is - as with the reading - somewhat restricted: only 42 points. The country with the least disparity is Finland (115 points) and the one with the most disparity is Belgium (157 points). Norway can be found midway between the 29 participating countries- ranked 15th with a score of 127 points (see Table 3.17).

3.7 Norwegian standards in mathematics literacy

In both PISA and TIMSS the Norwegian scores are close to the averages of all the countries which participated in the tests but considerably below other Nordic countries. Of particular concern is the fact that TIMSS Grade 4 pupils perform less well than their counterparts in Grade 8s. If this indicates that younger pupils are learning mathematics less successfully than did their older counterparts this could be serious. However, as with all cross-sectional studies, caution has to be exercised lest the result is simply the outcome of a bias in the sampling or a difference in the relative difficulty of the tests.

Scientific literacy

In the 2000 PISA tests Norwegian pupils performed at the OECD average level in science and had about the same spread of scores (standard deviation). They did better than Denmark but less well than Finland and Sweden. The 2003 PISA assessment recorded a drop of 16 points. This represents a statistically significant decline for Norway. Although still superior to the Danish sample, the Norwegian pupils' average score in 2003 is 64 points below that of the Finnish group (see Table A3.18).

There is a gender difference in favour of boys (in all the Nordic countries except Finland) amongst those who do well. Both the Norwegian girls and Norwegian boys do better than their Danish peers, but neither do as well as those from Finland or Sweden (see Table A3.19).

At the lower end of the range, Norwegian girls perform better than their Danish counterparts but not as well as those from Finland – which has less than 5% in this group – Sweden and the OECD. Norwegian boys also do less well than all the others having 4% more in this category than even the OECD as a whole (see Table A3.20).

The gap between the achievement of the average and that of the least achieving 5% - although sizeable - is fairly similar to the other Nordic countries and is smaller than for the OECD as a whole (see Table A3.21).

In the science results from TIMSS 2003, data for Norway, Sweden, Singapore and South Africa have been used in comparisons. In all these countries, boys performed better than girls. The sample from Norway, perform better than the international average and South Africa though less well than similar samples from Sweden and Singapore. Twenty one percent reach the Advantaged or High achievement benchmark compared to just 3% from South Africa, 25% from the International average, 38% from Sweden and 66% from Singapore. Ninety one per cent reach the benchmark of Low achievement, in comparison to only 13% from South Africa, 78% of the international average, and 95% of both Sweden and Singapore (see Table A3.22).

There are virtually no gender differences in the results for grade 4 pupils. However, the Norwegian means are much higher than those of Morocco (the lowest country at Grade 4), some 20 points below that of the international average and some 100 points below those of Singapore. Only 15% reach the Advanced/High benchmark in comparison to 1% from Morocco, 30% of the International average and 61% of the Singaporean sample. Seventy nine percent reach the Low Achievement benchmark in comparison to 24% from the Moroccan sample, 82% of the international average and 95% of those from Singapore (see Table A3.23).

In order to provide a fuller context on the equity of achievement reached by Norway, we examined the difference between the gap in achievement between those at the 75th and 25th percentiles - for all the OECD countries. In this analysis, which focuses on the middle 50% of the distribution of pupils, the difference between the country with the least disparity and the one with the most is, even more restricted than in either reading or mathematics: a mere 32 points. The country with the smallest gap is Mexico (115 points) and the one with the largest is Germany (157 points). Norway is ranked 18th with a gap between the top 25% and the bottom 25% of 143 points (see Table A3.24).

3.8 Norwegian standards in science literacy

The performance of Norwegian pupils in science is disappointing. In the two years of PISA tests Norway has moved from the average level to below it – a statistically significant drop. In the TIMSS tests, whilst the Grade 8 pupils perform above the international average, the Grade 4 pupils do not. Both girls and boys score considerably below the average and for this grade; the proportions reaching both the high and the low benchmarks are much smaller.

In terms of equity, Norway also performs rather poorly. The measure of disparity between the 75th and the 25th percentiles illustrates that Norway is just below average amongst the OECD countries. As with the reading and mathematics outcomes, it is crucial to stress that the science results only apply to performance at compulsory school age.

Problem solving

Norwegian pupils perform badly in this assessment – new in 2003 PISA. Fifty two percent of the Norwegian sample fail to reach level 2 – an even higher proportion than in the OECD as a whole. At the highest level, Norwegians again do less well than their Nordic neighbours and the OECD. Only half as many pupils reach this level as do in Finland (see Table A3.25).

3.9 Summary of Norwegian pupils' performance in attainment tests

It is clear from these data that Norwegian pupils at age 15 underachieve in comparison with Finland and Sweden and – in certain cases – the OECD countries as a whole. Often Norway also shows a wider spread of outcomes than Finland and Sweden, similar to those in other OECD countries. Overall, these results must be seen as disappointing, given that Norway is an advanced, rich country with a strong

commitment to equity and a high level of educational expenditure. At the same time, we must stress that this is not the end of the story. It simply reflects performance at the end point of compulsory schooling.

3.10 Differences in pupils' attitudes and behaviour

We also scrutinized the PISA data to gauge the attitudes of Norwegian pupils and to see how they behaved in school in comparison to pupils from other countries. Self-report measures of attitudes and behaviour depend on the expectations that young people have about school, but such data may still illuminate important differences in pupils' perceptions. As can be seen from the following discussion, the responses of the Norwegian sample are often different to those of their international peers.

Differences in attitudes

We were interested to see how the fifteen-year-old Norwegian pupils felt about their schools.

Norwegian pupils appear rather ambivalent about school. On the one hand, a bigger percentage of them – though still a small minority – thinks it *a 'waste of time'*. Whilst, on the other hand, the overwhelming majority feel '*they belonged'* and that they '*made friends easily'*. In both cases, Norwegian pupils are slightly more positive than their Nordic counterparts and the OECD as a whole see Table A3.26).

In order to probe the pupils' attitudes more thoroughly, we looked at two of the indices created by the PISA Team: one concerning general attitudes to school and one to do with developing a sense of belonging. Both these measures have been constructed so as to have a scale with a mean of 0.0 and either positive or negative values to indicate the feelings of the pupils.

Norwegian pupils are considerably more negative than their counterparts in the Nordic countries or in OECD as a whole. The only other negative score is that of Denmark but with a score only one seventh of that of the Norwegian sample (see Table A3.27). The scores of the second scale, however, are very different.

On this scale, the Norwegian and the Swedish samples have high positive scores whilst, those of Denmark and Finland are much more neutral. We conclude, therefore, that Norwegian pupils of this age in some ways find the school environment friendly and inclusive whilst, in others, they consider it much more negatively (see Table A3.28).

Differences in behaviour

Norwegian pupils report considerably higher percentages unable to "*work well*" than do pupils in other Nordic countries or the OECD as a whole. Likewise the proportions reporting long delays at the beginning of lessons are also considerably higher in Norway than elsewhere (see Table A3.29). However, caution is needed in interpreting these data: the proportion reporting long delays in Finland is nearly as high as in Norway and yet – as noted – pupil outcomes are far superior.

We also examined the reports of pupil behaviour completed by the head teachers of the schools which the pupil sample attended. Here the results need to be interpreted with even more caution, since they reflect an interpretation of events in the classroom which will be heavily coloured by expectations about what is - and what is not - acceptable behaviour, and which factors do and do not lead to effective teaching. The scope for subjectivity in this area is illustrated by the volatility of PISA results between 2000 and 2003 – with perceived problems sometimes doubling or halving between years. The most plausible interpretation of these different levels is changed expectations on the part of school heads.

The wording of the PISA question required head teachers to indicate whether in their school they considered that disruption "*hindered students' learning to some extent or a lot*". The level of disruption reported for Norway (73.8%) is considerably higher than for the other countries or the OECD as a whole (40%). If this reflects the reality of school life then classroom disruption is a serious problem in Norway (see Table A3.30).

PISA data also include the views of head teachers as to whether they consider that lack of respect for teachers hinders learning. The Norwegian answers to this question (35.5%) stand out from those of the other Nordic countries and from the OECD as a whole (22%) - see Table A3.31. But these figures need to be interpreted cautiously; the level of the reported problem almost halved in Finland between 2000 and 2003 and more than doubled in Denmark (in Norway it increased by just 5%).

The Norwegian head teachers are also particularly likely to report that poor relations between teachers and pupils hinder learning. Over 20 percent did so in comparison to less than 5% in Denmark and below 17% in the OECD as a whole – see Table A3.32. Again caution is required in interpreting these results. They appear volatile, with reported levels of the problem changing sharply in some countries – although not in Norway – between 2000 and 2003.

In order to complete our picture of the Norwegian education system, we also sought to examine the level of participation in post-compulsory schooling.

3.12 Adult learning and literacy skills

Adults in Norway and the other Nordic countries have the highest level of participation in adult learning in Europe. This is partly because Norwegian employers and authorities supply and pay for a lot more of such training than do other countries. However Norway and the other Nordic countries also have the lowest rates claiming that they are *'not interested'* (see Table A3.34). It appears, therefore, that the Norwegian system with a fairly relaxed approach to achievement up to age 15 may nevertheless encourage young people to continue their learning as adults. We now needed to check how well the adults performed in relation to those in other countries.

Norway has taken part in two major international surveys of adult skills, the International Adult Literacy Survey (IALS), undertaken in the mid 1990s with a wide range of other countries, and the Adult Literacy and Lifeskills (ALL) survey, undertaken in 2003, with a small group of other countries.

The International Adult Literacy Survey provides an examination of reading skills in three separate domains: prose; documents; and, quantification[23]. The survey examines skill levels amongst a sample of 16-65 year-olds.[24] In the reading of prose, Norway performs very well. It is ranked 3rd out of the 22 countries just below Sweden with almost the same average score as Finland. In the results for the second domain of document literacy, Norway also fares extremely well with a rank of 2. And in the third domain, quantification, Norway achieves the 4th rank (see Tables A3.35 - A3.37).

[23] The International Adult Literacy Survey was undertaken by the OECD and Statistics Canada in conjunction with the national governments of 20 countries. It operated between 1994 and 1998 and completed three cycles of data collection. Its aim was to "*make a contribution to the understanding of the demand and supply of skills in the global, knowledge-based economy.*"

[24] OECD/Statistics Canada (2000) *Literacy in the Information Age. Final Report of the International Adult Literacy Survey: OECD. Paris.*

On each of the scales Norway has a relatively small standard deviation indicating a restricted dispersal of scores. The high ranking positions indicate that the Norwegian results are consistently amongst the best of all the 22 participating countries.

Comparing literacy levels among school pupils with those attained as adults

It is clear that Norwegian pupils are underachieving in comparison with international peers at the age of 15. Paradoxically, it is also clear that the Norwegian adult population has excellent skills of literacy in comparison with other countries. We explored different explanations for what we term the *Norwegian paradox*.

We compared the literacy skills from PISA (at age 15) and from the ALL survey at age 16 – 25) for the five ALL countries where comparable PISA data are available. The PISA data show that Norway, Switzerland and the United States are all close to the OECD average. Canada has a stronger performance than the average, with a lesser spread of outcomes and fewer very weak performers. Italy's results are weaker than the average with a wider spread of outcomes and more weak performers (see Table A3.38).

But when ALL data for those aged 16 – 25 are compared with PISA results at age 15, Norway's comparative position improves markedly. Amongst the 16 – 25 year olds, Norway records the best average results, the lowest spread, and the smallest proportion of relatively weak performers. The comparison with Canada is particularly striking: Norway has around twice the proportion of very weak performers at age 15 but, by age 25, it has only half as many as Canada (see Table A3.38).

Differences in outcomes for PISA and ALL

Could the differences between ALL and PISA just represent a statistical artefact? Some possible sources of distortion are noted below:

- The surveys employ different test instruments. Both instruments, however, were specifically designed in an attempt to measure broad literacy skills in a way that would be fully comparable across a range of countries and experience shows that changes in the design of these types of test tend to have little impact on the relative performance of different groups. It is unlikely, therefore, that this factor could explain, in more than a minor way, the large differences in Norway's relative performance between PISA and ALL.

- The ALL sample**.** According to the ALL report, Norway is the only country that has stratified the sample by education level. However, one effect is that persons with unknown education level have been excluded from sample frame (ALL report page 317). One would assume that the literacy level among these persons are lower than average (recent immigrants etc.), which introduces a positive bias in the Norwegian ALL results. However, the excluded group constitutes only 3 percent of the target population, and the impact on the average scores may not be very large.

- An additional bias may be introduced by the low response rate in ALL for Norway (56 percent, among the lowest of the participating countries). As it is reasonable to believe that non-response is negatively correlated with literacy, even within the education groups that are used for adjusting weights for non-response, this introduces a positive bias for Norway.

- In comparing the country ranking between PISA and ALL, one should be careful to adjust for the population changes that occur between PISA and ALL. These changes are probably of different magnitudes in different countries: According to the ALL survey, immigrants have lower levels of

literacy than native-born respondents (page 210) in both, Norway, Canada and USA. The share of foreign-born in the labour force is 20 percent in Canada and 14 percent in USA, compared to only 5 percent in Norway.

Collectively these factors may affect the PISA-ALL comparison, but it is implausible to suppose that they completely invalidate it. How then might one explain relatively strong literacy levels in young adult Norwegians, and weaker results by international standards at age 15? In essence there are two competing explanations – one pessimistic and one optimistic:

- pessimistic - a decline in school standards over the last 5-10 years such that current 15 year olds will not go on to enjoy the positive outcomes visible in today's 16 – 25 year olds;

- optimistic - Norwegian teenagers 'catch up' with young adults in other countries during their late teens and early 20s.

We have been informed of some scattered evidence for a decline school standards in literacy and numeracy since the early 1990s (the first PISA generation entered primary school in 1992):

- The national survey of reading skills in 2nd and 7th grade showed a growing proportion of pupils below the critical threshold every year from the survey was introduced in 1994, until 2001. Thus, it seems that pupils who were 13 years of age in 1994 (22 years in 2003/ALL) received a better literacy training than students who were 13 in 1998 (PISA 2000 population) and 2001 (PISA 2003 population).

- Surveys of the mathematics skills of entrants to tertiary education, conducted by the National Council for Mathematics, has shown declining levels of skills since it was started in 1984, and with a steep decline during the 1990s. The level of mathematics skills among initial teacher training students is particularly low, and has been declining substantially, indicating a quality decline in teaching as these students have graduated and entered the teaching profession.

- The TIMSS surveys show a sharp decline in mathematics and science achievement in Norway between 1995 and 2003. Norway stands out with a large reduction in score in both 4^{th} and 8^{th} grade. At 8^{th} grade the reduction in score is equivalent to one year of schooling, compared to the pupils in 1995. The score of pupils in 4^{th} grade in 2003 is half a year behind the score of their peers from 1995, despite having attended one additional year at school.

- PISA 2000 and 2003 provides some evidence that Norwegian 15 year-olds are relatively unmotivated, in both reading and maths domains, by international standards.

However there is also evidence for the alternative optimistic interpretation of 'catch up' in the later teenage years and early 20s. For those without qualifications, Norway displays high rates of participation in adult learning although not quite as high as in other parts of Scandinavia. Low unemployment certainly helps the transition to work in Norway: in 2003 the standardised unemployment rate in Norway was 4.5% and only four of the other OECD countries registered lower figures[25]. Our conclusion therefore, is that while in some areas school standards may have declined, Norwegian young people may also tend to catch up between age 15 and early adulthood.

[25] OECD main economic indicators (2004)

Performance in other domains: maths and problem-solving

Examination of performance in mathematics completes the picture and reveals some similar factors. As already noted, Norway's performance at age 15 is mediocre, well behind Canada and Switzerland and similar to those of Italy and the United States. In the adult population aged 16 – 65, however, Norway's performance on the ALL numeracy test is now second only to Switzerland and well ahead of both the United States and Italy (see Table A3.40).

Two other skills dimensions *'prose'* and *'problem-solving'* are not reported here. The prose results are very similar to the 'document' results. In the problem-solving domain, for those aged 16-65, Norway has the highest mean score, and the smallest proportion of persons scoring at the lowest level of the countries using this scale (this excluded the United States).

3.13 Conclusion

This evidence provides the background to our policy recommendations. Clearly Norway's performance in PISA and TIMMS was weaker than might have been expected, there are difficulties in the school climate, and there are some particularly worrying indications of declining performance in some areas. We therefore make recommendations to address these weaknesses.

At the same time we should give weight to the ALL finding which shows young Norwegian adults in 2003 with skill levels equivalent to or better than any comparable country and few poor performers. While there are competing explanations for this apparently paradoxical result, these results do suggest that Norwegian education also has underlying strengths which need to be sustained and developed.

4. WHAT IS THE CAPACITY WITHIN THE EDUCATION SYSTEM TO IDENTIFY AND RESOLVE PROBLEMS OF INEQUITY?

This is the second of the questions we posed in the introduction. In our view, the capacity to identify and resolve problems to do with equity or the lack of it depends on three quite different components of the system: its underlying philosophy as expressed in its aims and objectives; the availability of information about the routine functioning of the system itself and the existence of a set of tools able both to monitor and evaluate progress and to intervene in order to introduce improvements at both policy and practice levels. We begin by examining the capacity of the system to *identify* problems.

The philosophy of the Norwegian system

The aims of the education system are expressed in various official publications. In terms of the relevant Act:

> *"The object of primary and lower secondary education shall be, in agreement and cooperation with the home, to help to give pupils a Christian and moral upbringing, to develop their mental and physical abilities, and to give them good general knowledge so that they may become useful and independent human beings at home and in society.*

Upper secondary education shall aim to develop the skills, understanding and responsibility that prepare pupils for life at work and in society, and assist the pupils, apprentices and trainees in their personal development. Upper secondary education shall contribute to increased awareness and understanding of fundamental Christian and humanist values, our national cultural heritage, democratic ideals and scientific thought and method.

The primary, lower secondary and upper secondary schools shall further the equal status and equal rights of all human beings, intellectual freedom and tolerance, ecological understanding and international co-responsibility.

Teaching shall provide a foundation for further education and for lifelong learning and provide support for a common foundation of knowledge, culture and basic values, and a high general level of education in the population.

Teaching shall be adapted to the abilities and aptitudes of individual pupils, apprentices and trainees."[26]

Of particular significance to our review is the phrase "equal status and equal rights of all human beings" – in other words - equity. Moreover, the specific instruction that "teaching shall be adapted to the abilities and aptitudes of individual pupils, apprentices and trainees" points to the requirement for the system to adapt to the needs of the individual. Within this framework, the existence of a fully comprehensive system of schooling from 6 to 19 and the adoption of un-streamed classes confirm the clear Norwegian commitment to equity. We find this commitment impressive. We also note that the PISA findings internationally confirm the significance of comprehensive systems and the lack of streaming policies as features associated with good equity outcomes.

Availability of information to identify problems of inequity

To be effective, the information component of the system needs to contain full details of the provision available. It also needs to include facts about pupils' characteristics in terms of their age, gender, ethnicity and parental background.

The existence of such detailed information enables any problems faced by pupils, teachers or by schools - or other educational institutions - to be identified. It facilitates monitoring of the progress of individuals and groups as they work their way through their life-long learning careers. Formal evaluation builds on monitoring techniques but, in addition, attempts to make judgements about the efficacy of processes, the success of projects and the merit of particular outcomes. Evaluations can be made of the work of individuals, groups or whole institutions.

Tools to resolve problems of equity

The final component of the system is a set of both policy and practical tools which supports the resolution of any problems which have been identified. These encompass the ability to create new laws affecting all aspects of the education system as well as less remarkable actions such as the issuing of non-statutory guidance, making regulations or initiating new projects. Policy tools need to be available at each level of the education system i.e. ministry, county or municipal and individual institution and to be geared to the responsibilities compatible with that level.

[26] Act relating to Primary and Secondary Education (Education Act) Last amended 30 June 2000. http://odin.dep.no/ufd/engelsk/regelverk/lover/014101-200002/dok-bn.html

Practical tools available to the ministry, local education authorities and individual schools

There are two main strategies available: mounting an investigation and taking remedial action.

Mounting an investigation

The central education authorities (meaning in practice both the Ministry and the Directorate for Primary and Secondary Education) could, for instance, investigate whether sufficient provision is being made available for adults seeking to catch up on their primary or secondary schooling by a county or a municipality. The local authority could investigate whether the institutions within its jurisdiction are meeting agreed standards. It could also investigate any parental complaints it had received about a particular school. The school – or other institution – could investigate any reported bullying or complaints about the behaviour or achievement of groups, or of individual pupils.

Taking remedial action

The central education authorities could call the county or municipality to account over any financial or other problem in its administration. It could also distribute any special discretionary funds. The local education authority could, in turn, call an institution to account over the way it has handled a particular problem. The individual school could alter its timetables or transfer teachers or pupils from one group to another. It could also increase or decrease the amount of extra assistance it is providing for a particular pupil's special needs.

Each of these components is essential if problems are to be resolved. Without sound information effective monitoring and evaluation are not possible. Furthermore, monitoring by itself – although it may reveal the extent of the problem – will do little about solving it. In our experience only interventions, based on systematic evaluation using high quality information, are able to resolve problems satisfactorily.

We were informed that the monitoring arrangements are currently as follows: The County Governor's Education Office is responsible for supervision of how the school owners and the schools fulfil the pupils' rights according to the Education Act. Normally, supervision is carried out through a visit by the County Governor to the municipality or the county where there is a dialogue concerning compliance with the body of rules and the schools' development. The foundation for this dialogue has mainly been official statistics, reports from previous visits and complaints from students and parents. This practice is commonly named "soft or dialogue-based supervision".

However, according to the Education Act, the County Governor has the authority to demand correction of practice if further investigation concludes that the body of rules has actually been infracted. This injunction must be respected without exception by the municipality/county regardless of their financial situation.

Annual reports from the County Governors provide both local and state level school authorities with information as a basis for remedial action. The Directorate of Primary and Secondary Education is responsible for the County Governors' activities.

In co-operation with the County Governors, the Directorate is developing a new model for monitoring and supervision which it is believed will be more effective. Based on the information provided by the new national quality assessment system and the skoleporten.no, it is anticipated that the County Governors will be able to perform more systematic and targeted supervision. A new element in this model would be a systematic, national investigation of compliance with specific parts of the body of rules. The selection of rules to be examined will be based on the data provided by the national quality assessment system and other matters. The Directorate has proposed that the theme for next year's supervision should be an

investigation of whether the municipality or county possess sufficient internal control systems to monitor their own compliance with the Education Act.

4.1 Current availability of information

Information about pupil progress in primary and lower secondary schooling

Many of those we spoke to told us that until recently the Norwegian primary and lower secondary school system had prided itself on the lack of formal tests and assessments. The positive aspects of this tradition are that pupils are not damaged by an exaggerated sense of failure and teachers are not over-constrained in their scope of what to teach. The negative aspects are that objective information about pupils' progress is hard to find and that there are few benchmarks illustrating typical stages of achievement by children of different ages for teachers to use in judging the relative progress of their pupils.

We were informed that standardized tests had been taken by pupils in particular grades in previous years. Norwegian schools have used locally devised tests for monitoring (primary and lower secondary) or for setting grades (lower secondary). Lack of standardised tests leaves the standards/ambitions on behalf of the students to be set by individual teachers and schools. Although teachers and schools have a lot of information from local tests, both level of difficulty and interpretation of results could differ widely between schools and teachers. Differences in how grades are set at different schools, gives some evidence of this.

It was believed that the practice of testing had fallen into disuse over the years because of a fear that by drawing attention to pupils' shortcomings the teacher might harm their attitude towards learning. We can understand this sentiment but disagree with its basis. In our experience, pupils can cope with such feedback provided it is given sensitively and seen as a means for pupils to improve their learning. This is exactly the point made by a number of writers in a recent publication about formative assessment in eight different countries[27].

> *"Feedback needs to be timely and specific, and include suggestions for ways to improve future performance. Good feedback is also tied to explicit criteria regarding expectations for student performance…"*[28]

Apparently, standardised tests were abandoned in the 80's due to this sentiment. Diagnostic tests were introduced on a voluntary basis in the 90's, but not widely used. Then diagnostic reading tests became mandatory in 2nd and 7th grade a few years ago (but are now becoming voluntary due to the introduction of national tests).

Without accurate information, teachers and pupils cannot know where best to position their efforts. In the same way, without accurate information policy makers cannot test particular theories about learning. One example of this was experienced by us during our review. We were frequently told that one of the major problems in Norwegian education was that, because of their commitment to equity, teachers *'taught to the average pupil'* and thus failed to address adequately the needs of the very able and those with special needs. Such a theory is plausible and, if borne out by facts, might well have indicated one reason for underachievement.

In fact, pupils at the 95th percentile for reading skills (the most able pupils exceeding the scores of all but 5% of their peers) performed quite well in comparison with their international counterparts.

[27] OECD (2005) *Formative Assessment: Improving Learning in Secondary Classrooms,* OECD, Paris.

[28] OECD (2005) Formative Assessment: Improving Learning in Secondary Classrooms. OECD, Paris. Page 50

Furthermore, the gap between the achievement of the Norwegian average pupil and those pupils performing least well (those exceeding the achievement of only 5% of pupils) was bigger than for comparable countries and the OECD average illustrating the learning decrement of the tail of underachievers. Close analysis of the PISA data, therefore, failed to support the theory of teaching to the average. This suggests that one of the causes of Norwegian underachievement may lie not in teaching to the average but – despite the principle of adaptive learning - in giving insufficient attention to the least able pupils. If this is the case, then it contrasts starkly with practice in Finland – the country which performed at the highest level in the PISA tests. There, amongst other policies, extra attention is devoted to identifying weak or slow learners and then providing them with extra '*special needs'* tuition. One of the outcomes of this policy might well be the very low proportion appearing in the underachieving tails of the distributions of Finnish pupils. By contrast, Norwegian teachers tend to relate special/extra tuition with stigmatisation of the student. Norwegian teachers "wait and see". The result is that special support may be given too late (increasing with the grade level in contrast to Finland where intervention is given early).

Information about pupil background

The economic, social and educational background of the parents of pupils may not be known unless a special effort has been made to collect such information. Yet, paradoxically, Norway is a country which has a system of unique citizen numbering. Every citizen is allotted a number which, under careful regulation, is used for national purposes. Much information about those who attend schools and other educational institutions, therefore, is already in place so there is scope for monitoring underperforming groups and analysing the difficulties they face. At the same time, legal confidentiality requirements mean that information about individuals cannot be passed to teachers or to a school.

This lack of information has now been somewhat ameliorated by the introduction of the *Skoleporten* website, which now provides a great deal of information about the performance of primary and secondary schools and the performance in formal tests of all pupils in grades 4 and 10. The data have been provided by the local authorities and the staff of schools. Our assessment of this development is given later in this report. National test results are also collected in a longitudinal database on individuals at a national level that allows for link to other registers at Statistics Norway.

Information about pupil progress in upper secondary schooling

For the upper secondary phase of schooling much information is available in addition to the information from the *Skoleporten*. Pupils arrive with the results of their school leaving examinations and are accepted on specific courses each leading to leaving certificates. During their courses marks are awarded on the basis of teacher assessments. These marks appear on pupils' certificates and have the same status as examinations. All pupils are required to sit at least one examination in one of their chosen subjects. Additionally, pupils are chosen randomly to sit formal examinations in common general subjects. Information about the progress of pupils through the schools is carefully recorded and national statistics of drop-outs are published. Furthermore, individual pupils who drop out are followed up by the counselling service.

Information about student progress in tertiary education

As with upper secondary schooling, students' progress through tertiary education is carefully recorded. We were informed, however, that it is difficult to ascertain precise numbers since some students choose to interrupt their studies and to resume them at a later date.

Existence of monitoring procedures

Those municipalities with sufficient education staff will visit schools as will, from time to time, officials from the County and – if appropriate – the County Governor's Office. But the impressions gained by such visitors in the past must have been as a result of what was seen at the time rather than as a result of systematic investigations. When there was little hard information available about schools, there could have been little systematic monitoring of either pupils' progress or school performance. Given the availability of information on the *Skoleporten* website this should now change. Some small municipalities, however, may not have sufficient resources to employ officers with sufficient expertise to provide a judgement of the quality of the school in its performance in the national tests or in its striving for equity. This is a point to which we will return.

Formal evaluations

We have been impressed by the number of formal evaluations of policy initiatives which have been undertaken. The evaluations of *Reform 94* cited in the CAR illustrate how important it is to monitor how much change actually occurs when policies are introduced and how crucial it is to evaluate the value of such changes. We have also studied the evaluation of *Reform 97* chaired by Peder Haug[29] and understand that evaluations of the *Competence Reform* and the *Quality Reform* are still underway. An evaluation of the Knowledge Promotion Reform is also being planned.

Opportunity for, and frequency of, interventions

We have not seen any data concerned with the frequency of interventions by ministry through the offices of the county governors, counties or municipalities or indeed by individual institutions. We suspect that many such interventions must have taken place but, possibly, mostly in emergency situations.

4.2 Current and proposed reforms

We have already noted the plans announced by Government which address some of these issues. In our judgement many of them are timely and focus on appropriate areas of concern.

We are interested in the idea of the 'Quality Framework' as a statement of quality and as a mechanism for the counselling services. The development work with the out of school hours - SFOs - also appears timely and, hopefully, will address concerns raised in other OECD reports about staff training and quality.

We support the idea of enhanced cooperation with parents and with the business communities and the greater scope for a locally-influenced curriculum. The freedom to experiment with a portfolio approach to learning, in our judgement, is also a positive move which may well encourage greater individualised approaches to learning and, ultimately, may lead to the achievement of greater equity.

We also support the further simplification of the upper secondary schools' offers and are interested in the implications of the new '*competence platforms'*. We are also pleased that the criteria for teacher training are to be made more demanding in order to recruit more able young people into teaching. We are also impressed that in-service competence training for existing teachers is to be better funded via the new competence initiatives. We also think the new courses for administrative school staff and head teachers are excellent initiatives.

[29] Haug. P., (2003) *Evaluation of Reform 97: Key Findings.* University college of Volda.

Crucially, we welcome the shift from a focus on *inputs* to one based on *outcomes* and the generation of information suitable for monitoring and evaluation purposes. In our view these changes are highly likely to promote better equity.

We also welcome the promotion of basic skills as promulgated by the Government in its white paper. These include the following skills:

- to be able to express oneself orally;
- to be able to read;
- to be able to express oneself in writing;
- to be able to do arithmetic; and
- to be able to use information and communication technology.

We see such aims as admirable and - if translated into concrete improvements through a consequent reduction in the number of underachieving pupils – as likely to foster greater equity. We have some questions, however, about some of the other reforms and their possible consequences for equity in the Norwegian system of education.

Increasing the length of the school day

We understand, for instance, that the number of lessons in Grades 1 – 4 are to be increased by a total of 190 lessons during 2004/05, and by a further 4 lessons each week from 2005/06. Given how short the school day has been in Norway, we consider this a sensible move. However, research has shown that it is not the number of hours as such that appear to make a difference to the efficacy of learning but rather how the time is employed.[30] Thus the extra time will need to be planned with care so that it provides a positive stimulus to learning rather than being seen as a punitive act, robbing pupils of their leisure time (or the time they use to study by themselves), or of simply adding to the work load of teachers. From the perspective of equity, an extension of learning time could be used positively to provide extra help to pupils who need remedial support or supplementary Norwegian language teaching.

Assessing performance at individual level

We also believe that testing can be a useful tool provided that it is used positively. Of course there are many different purposes for which tests can be used (see appendix), and there is also concern about potential damage to equity which could flow from crude school league tables. We shall, therefore, discuss these issues in some detail.

As we have indicated earlier, we favour regularly assessing the performance of school students, and providing feedback to the individual students, teachers and parents, as a means of guiding and supporting the learning process. We therefore welcome the approach of the new curriculum in seeking clearer standards and expectations for the performance of students at different stages in their school careers. These should support the development of a wide range of suitable assessment methods. Such methods range from the very informal to more formal pencil and paper tests. Tests have a long history in education, and perform multiple functions in guiding learning, determining qualifications and selection, and providing information about school, region and system performance.

[30] Mortimore, .P., Sammons, P., Stoll, L., Lewis ,D. and Ecob, R. (1988) *School Matters*, Open Books, Wells

Test and other information at school level: the Skoleporten initiative

Norway has recently introduced national tests in reading, writing, English and mathematics. The tests will be undertaken by pupils at the 4th, 7th and 10th year of primary and lower secondary education and in the first year of upper secondary education. We have not examined these tests in detail, but we trust that they will be helpful to pupils and parents in guiding individual learning – of course alongside other formal and informal means of assessment. Annex 2 presents a short overview of the different types of testing.

Since the end of 2004, a wide range of information has also been published about schools on the *Skoleporten* website. These data are presented at school, municipal and national level. Decision-makers in the education sector are the primary target group, but skoleporten.no is also intended to provide useful information for parents, pupils and other interested parties. *Skoleporten* includes:

- results from national tests;
- results from surveys of pupils (the 'pupil inspectors');
- results of public examinations;
- data concerning levels of resources at individual schools; and
- school completion rates.

The publication of test data for individual schools has been a recent controversial issue in Norway, as in many other countries where this practice has been followed. Across countries, those in favour of the publication of school-level test results and other data argue that:

- such data are necessary for teachers, school heads, and local authorities so that they can recognize and build on achievement and address any weaknesses;
- data, once collected, should be made available through publication to pupils, parents and other citizens all of whom have a legitimate interest in school performance. Well-informed and open debate on school quality drives innovation and improvement. Conversely, secrecy hides weaknesses and removes the pressure on poorly performing schools to improve; and
- data will also guide parents in choosing schools for their children, either by choosing where they live in relation to a school's catchment area, or more directly by seeking a place for their child in the school of their choice. In addition to a search for quality, parents may also wish to find a school with particular qualities suitable to their child. Competition to attract children will drive improvements in school quality. Even those who regard the collective effect of schools choice as uncertain would accept that it is better when informed by solid data rather; than by rumour and prejudice.

Conversely, those opposed to such publication argue that:

- schools' test results provide a weak and misleading guide to school quality. This is partly because test results reflect the school intake and other factors as well as teaching performance, and partly because they do not capture many less testable outcomes of schooling. Pressure on schools to perform well in the tests may distort and narrow the curriculum – 'teaching to the test' – or even encourage fraudulent marking or reporting of results;

- the media will inevitably transform even a sophisticated range of data about schools into crude league tables of 'good' and 'bad' schools. Such public labelling as a 'bad' school will damage morale among teachers, and sap the confidence of pupils and parents, making bad schools worse. In addition, some good or average schools reporting weak results because of the disadvantaged circumstances of their pupils may be similarly, but quite unfairly, stigmatised. The overall effect will be to increase inequality between schools;

- provision of information on schools inevitably encourages and legitimates schools choice. Educated and well-off parents actively seeking out 'good' schools for their children and shunning 'bad' schools will reinforce a polarization into good and bad schools making improvement more difficult for some schools.

There are powerful arguments on both sides of this debate and it is beyond the scope of this country note to provide an overall conclusion on their relative weight. The arguments, however, bear differently in different countries and circumstances and we present our assessment of the recent Government initiative, in the particular circumstances of the Norwegian system below. First, however, we wish to comment on the issue of school choice, as this issue appears to us to be related to the *Skoleporten* initiative.

4.3 Schools choice

Outside upper secondary level, the strong tradition of community schools and the fact that there is little scope for choice in sparsely populated rural areas means that the issue of schools choice has not often been seen as salient. Nevertheless we found evidence of choice emerging as an issue in the Oslo area, with some lower secondary schools apparently actively competing for pupils. We were also informed that school choice was being used actively as a driver of reform in the Oslo area.

School choice is at least as controversial an area as publishing schools test results and, again, we cannot resolve all the issues that surround it in this report. We do need to consider, however, how it is likely to be affected by the *Skoleporten* initiative.

In any system, parents - particularly affluent parents - have some degree of school choice because they can choose where to live partly on the basis of what they know about the reputation of local schools. However, residential choice apart, particular policies and their administrative arrangements can exert an influence on choice. Some policies permit or even encourage parents to place their children in schools other than those closest to their homes whilst others seek to discourage or even prevent this from happening. We recognise that schools choice has historically not been a large issue in Norway, but schools choice has been an increasingly salient issue in many OECD countries and we believe that the *Skoleporten* initiative is likely to increase parental demand for schools choice. We therefore consider that both central government and the municipalities will have to give careful attention to how this increased demand is managed.

Our assessment of the Skoleporten initiative

First, as we have indicated, we strongly welcome the measures taken to provide more information on individual performance. We also welcome the provision of information allowing schools to monitor their own performance and municipalities to monitor the performance of schools. We commend the approach of publishing schools test results alongside a wide range of other data. This means that those who wish to consider such rich information about a school can find it and it makes more difficult (but not impossible) the task of constructing simple and crude league tables.

We also think it important that parents and pupils alike should have information about the general characteristics of the schools attended, as this facilitates an informed dialogue between parents, pupils and schools. *Skoleporten* provides quite a rich range of information for pupils and parents although it does of course need careful interpretation and supplementation with more qualitative understanding.

We agree, bearing in mind the evidence of the PISA data, that there are issues in Norwegian education which require reform. We also believe that the availability of better information on pupil performance is very central to that reform. However, there are two factors, applying particularly to Norway, which suggest that the country should pursue a relatively cautious approach to the publication of schools-based data.

- PISA demonstrates that, in contrast to many other countries, variation in test performance *between* schools in Norway is very small[31]. The implication is that obstacles to learning may be distributed relatively evenly between schools rather than being clustered *within* particular schools. School-based data can only partly illuminate, the obstacles to learning which need to be overcome.

- As noted earlier, despite some under-performance at age 15, Norway's young adults perform impressively, in the literacy results of 16 to 25 year olds[32]. This could reflect some decline in school standards, but it may also indicate underlying strengths in the system. Given this outcome, we believe that reforms of basic schooling should be pursued cautiously and consensually – avoiding any unnecessary shocks to the system.

4.4 The capacity of the Norwegian system to identify and resolve problems of inequity

We think that the Norwegian education system's overriding philosophy and comprehensive structure actively promotes equity and thus tries to resolve problems of equity from its conception. At the same time we consider that there are insufficient concrete strategies to resolve equity problems. There is special language support for immigrants. Other mechanisms, such as adaptive learning, are promising, but have unfortunately not been applied as influentially as was originally intended. Overall, therefore, this is an area in which we find gaps and weaknesses.

Some current reforms seek to address this problem. We understand that one of the declared objectives of the Knowledge Promotion Reform (originally set out in the White Paper on the Culture for Learning) is to strengthen equity in education through increased emphasis on adaptive learning. The declared aim of the reform is to sustain and develop the best in basic education, with a view to ensuring that pupils are better able to meet the challenges of the knowledge society. It is intended that learning goals will be stated more clearly, and the basic skills of pupils and apprentices will be strengthened, while safeguarding the schools' central role as mediator of values, general educational standards and culture. Schools meet pupils and families from increasingly diverse backgrounds. All pupils and apprentices will have a right to adapted and differentiated learning and teaching programmes, according to their own requirements and needs.

The National Quality Assessment System is intended to support equity in the system by giving all stakeholders new and more specific information about weaknesses and strengths of the educational provision, and thus enable those responsible to take adequate action, notably to ensure equity in results in basic skills for pupils at risk of falling behind.

A reform entitled "Competence for Development. Competence Development Strategy in Basic Education 2005-2008" has also been launched. The staff in basic education will be required to possess the

[31] OECD 2004, p.162, figure 4.1; OECD, 2001, p 61, figure 2.6)

[32] OECD and Statistics Canada, 2005

competence needed to ensure that pupils and apprentices receive adapted education, including the opportunity to develop skills and talents in accordance with the requirements of the General Curriculum, the Quality Framework and the subject curricula. It is intended that, through increased competence, school leaders, teachers and instructors in apprenticeship companies will be stimulated to meet the challenges related to the changes in content and structure which the reform involves. The strategy implies a historical increase in the funding of competence development.

A series of strategic plans have also been introduced:

- *Maths, Science and Technology – Naturally,* Strategy for Raising the Competence Level in Math, Science and Technology 2002-2007.

- *Make Space for Reading,* The Norwegian Strategy for Stimulating Reading Abilities and the Joy of Reading 2003-2007.

- *Equal Education in Practice!* Strategy for Better Learning and Greater Participation by Language Minorities in Day-care Centres, Schools and Education 2004-2009.

- *See Opportunities and Make Them Work!* Strategy for Entrepreneurship in Education 2004-2008.

- Strategy for Improving the Teaching of Foreign Language in Basic Education 2005-2009 (Not yet available in English).

- Strategy for Improving the Learning Environment 2005-2008 (Not yet available in English).

In the next section we will document our own conclusions and make a series of recommendations on how we believe the system could be improved.

5. DISCUSSION OF ISSUES AND RECOMMENDATIONS FOR IMPROVEMENT

The previous sections of this Report have discussed the background to the Review, considered how much equity can be found in the current Norwegian education system and endeavoured to judge the capacity of that system both to identify and to resolve problems of equity. This section will present our view, from an equity perspective, of the strengths and the weaknesses of the system. It will also list our recommendations as to how that equity can be preserved and even enhanced.

5.1 Equity in the education system

In our view the Norwegian system of education has much to commend it. Accordingly we make a series of recommendations designed to build on existing strengths.

Well-structured system

We believe the structure of the education system to be generally sound. The separation of roles and responsibilities between the various authorities – central government, counties and municipalities – appears well understood. The division of schooling into primary, lower and upper secondary phases enables appropriate attention to be given to pupils of different ages[33]. The almost universal integration of pupils with special educational needs into ordinary classes is exemplary. More generally, we consider the philosophy underpinning the idea of comprehensive education, equal parity of general and vocational strands and 'adaptive education' – indicating a willingness to re-think the pedagogy to suit the needs of the pupil – to be excellent.

We recommend that the basic structure of the education system be preserved.

High resource levels

We are impressed with the level of national resources which have been dedicated to all parts of the education system by successive governments. We consider that in an information-rich technological world this is a prudent policy. We endorse the fact that loans are being converted into non-returnable grants for upper secondary school pupils. We trust that this will ensure that people are not put off entering tertiary education because of established debts. We also believe that the long-term investment in children and adults who do not find learning easy is important and that it will repay the country in the long term.

We recommend that the current level of investment in education should be maintained.

[33] We noted potential tension n between the ECEC – overseen by the Ministry for Children and Family Affairs – and the phase of Primary Schooling – overseen by the Ministry for Education and Research. Whilst some difference in aims and approaches is to be expected, these need to be monitored and managed.

Comprehensive, non-streamed schooling

The heart of the Norwegian system is the comprehensive school – primary, lower secondary and upper secondary. This is excellent for equity and the fact that these schools are unstreamed and that teachers are free to group pupils in many different ways for learning purposes also helps pupils who find learning difficult to remain committed to learning. However, in line with the evaluation of Reform 97, we consider that the principle of adaptive learning needs to be more widely used.

We recommend that the comprehensive, non-streamed, model of schooling should be retained.

We also recommend that an increased emphasis should be given to the principle of adaptive learning.

Anti-bullying policies

Norway has long provided a model for other countries to follow in the way it deals with bullying (mobbing). The acceptance that this behaviour is the responsibility of the school in which it occurs coupled with highly developed procedures including the involvement of fellow pupils in consideration of how to deal with those who engage in it is highly commendable. On behalf of the Government, and together with the Norwegian Association of Local and Regional Authorities, the National Parents' Committee for Primary and Lower Secondary Education, the Union of Education and the Commissioner for Children, the Prime Minister signed a Manifesto against Bullying in 2002. The Manifesto has been followed up by an action plan to combat school bullying and violence.

The parties to the Manifesto have joined together in pursuit of a common goal – zero tolerance for bullying. One of the main elements of the work under the Manifesto is an amendment to the Norwegian Education Act regarding schoolchildren's working environment. Pupils and their parents now have the right to participate more extensively and there is a better system for lodging complaints, while the tasks of the schools have been much more clearly set out. Another important element of the Manifesto is to actively include children and young people, parents, employees, school leaders and school owners to ensure that this commitment is translated into a long-term framework for combating bullying at the local level. Thirdly, schools are offered the opportunity to participate in various programmes that address bullying, programmes with documented effects, which really do make a difference. The effects of the Manifesto and its accompanying measures have been evaluated.

We recommend that anti-bullying programmes, research and development should be maintained.

Life-long perspective on learning

The provision of the different phases of education from the *Barnehager* through the years of compulsory schooling, upper secondary and tertiary education or through the vocational route via apprenticeships to work education and – in both cases – to lifelong learning, appears excellent. We see this comprehensive network of opportunities as greatly enhancing the opportunity for equity in the country.

We recommend that the life-long learning perspective should be retained.

Parity of esteem between general and vocational education

We are also deeply impressed with the way that both vocational and general education courses have been brought together into comprehensive upper secondary schools. The opportunities for pupils to change direction and the absence of 'dead-ends' are remarkable. The system of following up drop-outs in order to offer counselling and recommend alternative courses is also excellent.

We recommend that parity of esteem between general and vocational education should be preserved and the follow-up counselling service improved.

Adult literacy levels

The literacy levels of young Norwegian adults are strong, with few poor performers. Although there are some ambiguities in the evidence, and some decline in school standards appears to have occurred, it also seems likely that Norwegian teenagers continue to improve their literacy standards during their later teenage years and in their early twenties.

We recommend that reform in basic education should be implemented cautiously, and monitored carefully, to ensure that smooth transitions from school to work are not damaged, and that high levels of adult literacy are maintained.

Geographically dispersed provision

We have noted that tertiary level education is now available on sites throughout the country and that admission is guaranteed to all qualified persons. We are also aware of the rights for those adults who have missed out on their schooling to follow courses so that they too can have access to higher education. The establishment of VOX, with its links with the world of employment and its methods of judging the value of particular work experience for entrance qualifications, appears a wise move. We are concerned, however, that the opportunities for adults who have missed out on primary and secondary schooling and who need to qualify themselves for the tertiary stage are not uniformly available.

We recommend that additional, suitable provision should be made for adults (including immigrants) who wish to pursue primary and secondary education courses.

Opportunities for innovation

We have frequently been struck, as we have considered different phases of the system, by the opportunities for innovation open to those who work in Norway. Whether concerned with following the entire upper secondary curriculum via specially designed computer tasks or grouping lower-secondary pupils according to the pupils' own estimates of how much learning help they need, it appears that head teachers – as long as they can take their teachers and the parental community along with them – have the freedom to introduce radically new ways of working. We have also been impressed with the opportunities offered to pupils to express their judgments of schools through the pupil inspectors' website. Finally, we wish to commend the Norwegian tradition of evaluating major changes in order to learn any relevant lessons. We see this as a strong incentive to creative thinking about learning and constructing better ways to stimulate and support it.

We recommend that the scope for innovation should be preserved and enhanced, particularly where it may improve equity.

5.2 Overall success in establishing equity

As we have noted, in many areas of education in Norway the opportunity for equity to be achieved has already been firmly established. Individuals can express and develop their individual talents without fear of being stereotyped or of meeting overt discrimination. Where competition is used as a spur to advancement, it generally appears to exist in a fair environment regardless of gender, ethnicity, socio-economic background or place of residence. We also believe that, in general, the system has endeavoured to be reasonably fair and supportive to the Sami People and to immigrants, although we have some practical suggestions for additional measures to support their educational endeavours.

This list of equity strengths is highly commendable. We know few countries that can begin to match the positive philosophy, quality of information and potential tools open to Norway. We know of even fewer which have achieved this level of equity within their systems.

There are, however, also a number of weaknesses in the Norwegian education system which, in our judgement, hinder the pursuit of equity. We propose, therefore, a series of recommendations designed to address these weaknesses.

Balance of expenditure priorities across the system

Education expenditure faces competing priorities, and equity considerations should bear on those priorities. In this context we will make recommendations about the current balance of expenditure across the system, particularly in respect of early childhood education and care and tertiary education, without seeking additions or subtractions from the overall budget.

We are impressed with the principle of the *Barnehager* – providing high quality care and education for young children. As we have noted, research evidence shows that early childhood education is particularly effective when it is made available for disadvantaged children. This suggests that the equity of the whole system could be improved if free or very low cost pre-primary provision were to be made available for such children. We are therefore concerned that it is still not universally chosen by parents. We note the comments made in the OECD review of early childhood and care, where the country note was published in June 1999.

> *Overall parental fees are high and a funding formula, which was proposed and adopted without any explicit rationale, has not been implemented. These issues can, individually and cumulatively, affect attendance of young children at Barnehager, to the detriment of children from less advantaged backgrounds. There appears to be a risk that, without great care being applied, the cash benefit scheme may further exacerbate these inequalities*[34].

We note that, since this review was published, government funding of *Barnehager* has been raised from 4,5 billion kroner in 2000 to 11,9 billion kroner in 2005, the main aim being to lower the parental fee. There has been broad political support for this policy, leading to the introduction of maximum fees, and there is a parliamentary decision on lowering the maximum fee further. Furthermore, according to legislation, parental fees must be lowered for families with low incomes and families with more than one child attending *Barnehager*. While welcoming these developments we note that Norway, despite high levels of overall spending on education, has still not matched the provision of early childhood education and care in some other OECD countries, where provision for those aged 3 – 6 is free and near universal (for example France) .

Moreover, although Norway funds tertiary education and adult education through the Ministry of Education and Research and early childhood education through a separate Ministry, similar principles should underpin funding arrangements. We note that tertiary education, unlike early childhood education and care, requires no fees. In addition, Norway devotes substantial additional public expenditure to the support of tertiary students through a mix of grants and loans.

We understand the attachment of Norway to the principle of free tertiary tuition, but would point out the well-rehearsed equity arguments against such a subsidy, namely that such arrangements provide public funds to support the education of those who very often come from better-off backgrounds, and who very often go on to hold high income jobs. Given this position, with substantial public resources being used for

[34] OECD Country Note: Early Childhood Education and Care Policy in Norway, June 1999, paragraph 154

these purposes as a result of the political commitment, it is difficult to argue that early childhood education and care should not receive at least equivalent attention and resourcing. We therefore conclude that, on equity grounds, these expenditure priorities require adjustment.

We would also repeat, and endorse, the criticisms made by the earlier OECD review on the cash-benefit scheme. As explained earlier, our view is that any incentive for poor or disadvantaged parents not to use the provision available is undesirable, and at the other end of the spectrum, the use of public resources by wealthy parents to fund private childcare arrangements has few equity merits. We might not press our point if we accepted the basic rationale of the cash-benefit scheme – namely that of ensuring that both users and non-users of provision receive similar subsidies directly or indirectly – but we do not accept this rationale. The notion that non-users of subsidized services require compensation strikes us as highly questionable – such a principle might for example require us to compensate those who do not choose to participate in adult or tertiary education.

We do not intend this recommendation as a means of saving money, or of disadvantaging the parents of young children. There are other means (through universal child benefits or through higher levels of subsidy and provision of childcare) of supporting the parents of young children without the disincentive effect which we have noted.

> *We recommend abolition of the cash-benefit scheme and that, in future spending rounds, - within a necessarily limited budget - priority should be given to support for early childhood education and care over the costs of tertiary education.*

Inappropriate classroom behaviour and lack of respect for teachers

As we noted in an earlier section of this Report, the classroom behaviour of some pupils concerns their teachers. Not only was this an issue reported to us by our respondents but data from PISA show pupils complaining that over a quarter of the sample felt they could not work well in class. PISA also shows Norwegian head teachers claiming that in almost three quarters of classes' pupils could face some incidents of serious disruption.

In our own observations we were struck by the informality of many of the pupils in the school setting – sitting on the floors in corridors, talking extensively in classroom lessons and addressing their teachers by their first names. Teachers typically explained that effective discipline had to emerge through the pupil's self discipline. We found this argument plausible and certainly also saw some excellent behaviour in schools, but there may also be risks in this strategy. PISA data show that 35% of Norwegian head teachers consider that pupils lack of respect for their teachers hinders learning to some extent; a figure considerably higher than in similar countries or the OECD as a whole. We therefore support the action taken by the Ministry in encouraging municipalities to draw up local rules for acceptable behaviour in cooperation with the parents and students, cf. Circular 07-2005 from the Directorate for Primary and Secondary Education ("Om ordensreglementet i grunnskole og videregående skoler").

> *We recommend that the municipalities, the teachers' and the school students' unions and parents' representatives draw up local rules for acceptable behaviour.*

Long tail of underachievement

The data from the international assessments show that a relatively high proportion of Norwegian pupils - especially boys - are failing to overcome their reading difficulties before leaving their lower secondary schools. Boys fare better than their female counterparts in both mathematics and science literacy but, in comparison to similar countries, their results are still mediocre.

There is a wide gap between the achievement of the average and that of the lowest achieving groups – demonstrating a tail of underachievement. Even in problem–solving - where many of our respondents expected the Norwegian reliance on self-discipline and innovation to cause their pupils to shine – the results were unimpressive in comparison to those of similar countries. It is likely that those pupils whose parents have enjoyed only limited schooling and other vulnerable children (in terms of their low socio-economic status, potential special needs and in some cases ethnic and language backgrounds) make up the tail of underachievement. Whilst some of these pupils will catch up during their upper secondary years some will not and fewer will go on to enjoy the opportunities of tertiary education. This problem can be tackled under three headings: first, innovations and interventions designed to reduce the risk of underachievement; second, monitoring to identify those who are falling behind; and third, interventions designed to support those who are so identified.

> *We recommend that research is undertaken into ways of supporting the early learning of disadvantaged pupils in danger of underachieving*

Low expectations at age 15

We believe that one of the reasons for underachievement at age 15 may be the predominance of a culture in which children are under-challenged. We have been impressed by the quality of care provided for children, the emphasis on social development and the priority given to out-door play but worry that expectations about intellectual development are too low.

Data from the PISA studies provide support for such a view (see Table A4.1). Norwegian head teachers consider that a relatively high proportion of their teachers had low expectations for their pupils (20.4%). Although the proportions were slightly smaller than for the OECD as a whole, they far exceeded the other Nordic countries (Finland 6.7%; Denmark 9.1%; Sweden 11.5%).

We know that under-expectation particularly affects those with any form of disadvantage. We have noted with interest the comments of Peder Haug on Reform 97 (cited in the CAR) that schools often cope best with those pupils who are advantaged and who find learning relatively easy. It is, of course, difficult to maintain high expectations for all pupils regardless of their seeming capabilities and backgrounds. International evidence shows that no country has yet achieved this, yet PISA data suggest that many other countries appear to do so rather more effectively than Norway.

> *We recommend that municipalities and the teachers' and school students' unions establish a working party to explore how expectations about pupils' intellectual capabilities can be raised (with special efforts being given to the raising of expectations about the performance of pupils deemed to be disadvantaged).*

Few benchmarks and lack of feedback

One factor which may contribute to underachievement is the absence, within the Norwegian system, of benchmarks of expected standards. Without such clear markers it is very difficult for teachers to know whether a pupil's progress is adequate. The existence of well-researched benchmarks indicating expected standards at particular ages in all the major subjects of the curriculum would surely greatly assist new teachers and would provide a reliable checkpoint for established ones.

Related to the absence of benchmarks is the lack of what we term *real-world feedback* until very late in a pupil's career – as we noted in an earlier reference to formative assessment. We understand the traditional reluctance of Norwegian teachers to introduce too much formal testing but we know that without some accepted benchmarks it is extremely difficult for teachers to judge the extent of a pupil's progress. We believe an important distinction needs to be made between tests which are used for

diagnostic purposes and which could be the basis of established benchmarks and those which are used for other purposes to do with awarding qualifications or monitoring of the system.

Diagnostic tests are used to help the process of learning by providing immediate feedback to pupils and teachers. Whilst such information can also be used by head teachers - and indeed municipalities – to monitor progress, its principal purpose remains the promotion of learning.

The new curriculum should allow for the development of clearer subject standards.

> *We recommend the establishment of a research project to consider how age-related subject benchmarks could be developed alongside the new testing programme.*

Insufficient monitoring

Related to the lack of benchmarks of standards, we are concerned that the progress of pupils through their school careers appears not to be monitored adequately. Of course many conscientious teachers will do it anyway but, prior to the introduction of national tests, there appeared to be few systematic procedures for monitoring in primary and lower secondary education. We see this as one reason why Norway has such a tail of underachievers. Had pupil progress – or lack of it – been systematically monitored and suitable remedial action taken, this tail might have been reduced to the size of comparable countries.

Successive PISA exercises have demonstrated that the differences in outcomes between Norwegian schools are relatively small, but this does not mean that one can be complacent about school standards. In the past there were few suitable mechanisms whereby the municipality could monitor the performance of its primary and lower secondary schools. Since the end of 2004, however, a wide range of information has been published about schools on the *Skoleporten* website. These data are presented at school, municipal and national level.

While the direct management responsibility for schools lies with local government, the Ministry also has an over-arching responsibility. To reflect this position the ministry needs a means of monitoring the activity of local authorities. Thus local authorities' records in comparing results, monitoring procedures and the history of interventions across different authorities should be available to the ministry. From the perspective of equity such monitoring and the possibility of intervention will provide numerous opportunities to address the underachievement of the most vulnerable pupils.

Provided that valid and reliable data are available, monitoring can serve a number of different purposes. Thus each child's progress can be monitored by the class teacher and special action taken if deemed insufficient (where, for instance, a pupil appears hampered by his or her lack of adequate Norwegian or seems to be unduly troubled by home circumstances). Each class's results can then be monitored by the head teacher and, in a similar way, action can to be taken (if the class average is particularly low or there is a high proportion of particular pupils failing to meet benchmark standards). In turn the municipality or county should monitor the performance of whole schools. Finally, the Ministry should monitor the work of the Municipalities and Counties.

The *Skoleporten* will provide much information for all those involved with schools. We understand that, under Norwegian law on freedom of information, public authorities cannot deny information, including data collated at school level, to the media or other interested parties, as long as it does not conflict with individual privacy. The risk is that as a result, schools with apparently poor results may fall into a spiral of decline, if parents, teachers and pupils lose confidence in the school.. To guard against this the authorities may need to make a series of robust interventions in support of such schools. Those interventions would need to command the confidence of pupils, teachers and parents. While such

interventions would in the first instance be the responsibility of the municipality, the central authorities – through the county offices - will need to consider how they can best be supported.

We understand that school-level test data have been published in Sweden since 2001. This initiative has been linked to increased school choice, and since 2003, the Swedish National Agency for School Improvement has sought to support schools facing particular problems. While school-based data are published in a number of countries, Sweden offers a recent Nordic example where outcomes can be examined in the light of the arguments advanced for and against the publication of school-level data.

In contrast, we have learned that Finland's approach to assessment and school choice is quite different. In Finland the aim is that school evaluation information should be used solely to improve schools. The National Board of Education performs tests on pupils in around 100 schools - as a sample of the whole country. In addition some municipalities choose to pay to have pupils in their schools tested. The schools and municipalities involved then receive their own results alongside information about national averages. The National Board does not make this information publicly available though it is open to individual schools to do so if they so wish. (There has we understand been a recent challenge to this arrangement under Finland's freedom of information legislation).

Denmark has followed a somewhat different strategy again, of implementing tests to be used to support the learning of individual students, but prohibiting publication of the data.

We endorse the approach of the Ministry in monitoring developments in Sweden and Finland. We also note that the tests have been evaluated through surveys of the users of the system (pupils, teachers, head masters, parents) and through independent professional quality evaluations. This has been done to achieve the best quality possible of the test. There have been adjustments made in accordance with these evaluations. We note that these evaluations primarily concern the quality of the tests and are rather different from a broader exercise which would explore the use and impact of the data.

The discussion of publication of results raises the question of what has come to be called a '*value-added'* approach. Measures are designed to measure the contribution of the school after other background factors, outside the school's control, are subtracted. This is typically pursued by taking account of the social mix in the school intake and, where these are available, the previous test scores of pupils so as to equate, as much as possible, for differences in socio-economic status and learning levels within the population of the schools. . There are, as yet, a number of technical and conceptual challenges to be overcome before value-added measures are likely to be recognised as valid and reliable measures. We welcome the approach which Norway has taken to the OECD to seek international sharing of best practice on this issue.

We are in no position to evaluate the actual impact of *Skoleporten* in Norway and we can therefore do no more than draw attention to potential outcomes. On the one hand we have identified the potential benefits of schools-level data, and on the other the risks of published data. We therefore believe that Norway should proceed with caution, so as to obtain the benefits while controlling the risks involved. In particular we believe that the Ministry should pause after the initial rounds of testing, and the publication of *Skoleporten* results, to assess the impact of what has been done so far, and to consult on the next steps with the interested parties. In so doing, *we recommend that it should:*

- *attend to the risk that variation in schools' quality might be increased by the flow of information in Skoleporten;*

- *examine the experience of assessment in Sweden and Finland;*

- *support the development of better value-added measures; and*

- *discuss with municipalities and other stakeholders the implications of potential increased demand for school choice.*

In suggesting this consultation, we are not presupposing any particular solution to the complex and many-faceted problems which we posed earlier in this Note. We believe, however, that their resolution is crucial and we trust that Norway will find solutions appropriate to its own particular needs and values.

Inadequate intervention strategies at the school level

Having identified those falling behind, effective means of helping those pupils are also necessary. Clearly a small proportion, perhaps 5% of the cohort, will have a diagnosed disability or learning difficulty, but there will be a much larger proportion – perhaps 20 – 25% of the cohort - that will be at risk of falling behind at school. We note that all municipalities and counties are obliged to have an Educational-Psychological Service ("PP-tjeneste") assisting the schools and the teachers in establishing systematic strategies in how to deal with pupils with learning difficulties and pupils at risk of falling behind.

Teachers and schools require a whole range of strategies, adapted to a range of individual circumstances and contexts to direct help to these individuals. It is not clear to us that such a range of strategies was currently in place.

> *We recommend that the Ministry and municipalities work with the teaching unions to devise a suitable range of intervention strategies.*

Inadequate intervention practices by local authorities

As we have already commented, monitoring, by itself, seldom improves a situation: some further action - planned in the light of the information revealed by the monitoring – is usually needed. Whilst undoubtedly there is a tradition of municipalities and counties undertaking investigations of schools in their jurisdiction and overseeing changes in policy or practice of the school, it appeared to us that there were few formal mechanisms established to guide such actions. If we are correct, then we deem this to be an omission.

> *We recommend that the associations of local government and the head teachers unions write guidelines to deal with school interventions.*

Need for monitoring of local authorities by government

While the direct management responsibility for schools lies with local government, the Ministry also has an over-arching responsibility. To reflect this position the ministry needs a means of monitoring the activity of local authorities. This should not be an intrusive or heavy handed operation. It could be developed out of the existing roles of the county governors. A “light touch” mechanism would examine local authorities’ records in comparing results, monitoring procedures and the history of interventions across different authorities and make this information available to the ministry. From the perspective of equity such monitoring and the possibility of intervention will provide numerous opportunities to address the underachievement of the most vulnerable pupils.

> *We recommend that the ministry engages with the municipal authorities and the offices of the county governors in order to create an appropriate ‘light-touch’ monitoring procedure.*

Insufficient expertise in multicultural, bilingual and special needs teaching

We question whether preparation for those who will be expected to teach bilingual pupils Norwegian has been adequate. We therefore note and welcome the new curriculum guidelines for teacher education, adopted in 2003 which emphasize the multicultural and bilingual context in schools. We are also concerned about the new mandatory training programme for adult migrants. While the efforts seem to be positive in respect of the learning of Norwegian and the provision of practical training, linking this to the *right to stay* in the country might be considered excessive. Using school-based resources to provide learning opportunities in learning the Norwegian language for migrant parents while their children are attending ECEC or primary schooling might be a worthwhile strategy. This would help children, parents and developed positive school-parent relationships.

Given the changing ethnic balance of Norwegian society, we also question whether enough time is being devoted to teaching of multiracial issues. We also question whether appropriate curriculum materials – which do not treat minorities as *invisible* - are sufficiently available. We therefore very much welcome measures in the strategy plan "Equal education in practice! Strategy for better learning of greater participation by language minorities in day-care centres, schools and education, 2004-2009". These measures seek to strengthen the development of teaching aids for immigrant students and the quality of these aids in primary and secondary education.

Overall, in view of the impressive Norwegian policy of seeking to integrate the overwhelming majority of children with special educational needs, we question whether sufficient preparation is currently being devoted in both initial teacher training and ongoing in-service training courses to the specific skills required to teach pupils with and without special needs in an integrated classroom.

> *We recommend that the amount of time devoted to multicultural, bilingual issues and special education issues in teacher training should be increased.*

Non-language-based support for immigrants

As we noted earlier, the use of block grant methodology and earmarked funding poses some problems in connection with immigration and multiracial issues. While the broad approach of targeting resources to assist immigrant children (defined as language minorities) to integrate into the Norwegian education system and society is clearly commendable, there is some evidence that ear-marked funding can distort practice at the school level. This can happen when there are local incentives to retain pupils in special classes beyond the point where it is helpful to them. Clearly, the advantages of separate help need to be weighed carefully against the integrative advantages of taking full part in ordinary Norwegian classes.

Furthermore, municipalities with immigrant populations are facing a number of unfunded demands for such posts as community liaison workers or school support staff. Yet, apart from some special funding arrangements for refugees, there appears to be no funding arrangements in place to support the education of immigrants beyond language education – although it was made clear to us by those involved that there are many other such needs which Norwegian schools and municipalities are already attempting to meet.

We are inclined, therefore, to support an Oslo initiative which would allow additional resources to be channelled more flexibly to mainstream teaching reflecting the needs of immigrants. Going beyond this, we think there may be grounds for exploring whether the educational needs of immigrants might be reflected in the block grant arrangements. This would recognise that the inclusion of a migrant population involves additional demands on a municipality in a number of areas including health and social services as well as educational provision. Such arrangements would also remove the risk associated with current ear-marked funding of distorting school practice.

We recommend that the funding methods used to support the needs of immigrants should be reviewed after consultation with ethnic minorities.

We offer these recommendations as possible ways forward. We are conscious of a problem, however. Much experience has shown that if realistic solutions are to be found they have to fit with the culture and traditions of the host country. Yet, it is clear to us that hitherto many of our suggestions for monitoring, the use of evaluation techniques and the possibility of interventions at school and municipal level have definitely not been a part of the system. The challenge, therefore, is whether those involved in the education service can – together – engineer a change in its culture and thus develop new traditions. We are glad to see that efforts and additional resources are currently being directed towards making schools better learning organisations. Two research and development programs for school development will start up in the autumn 2005. As far as our own recommendations go, great skill will be needed to take our necessarily unelaborated suggestions and translate them into policies and practices compatible with Norwegian thinking.

5.3 Conclusions

As we have noted, we were impressed with much that we saw in the Norwegian education system. In a number of ways an equitable education system – a long-standing goal of the country – has been established and much good has been accomplished. The international assessments, however, have revealed that - at the age at which the PISA tests are taken – there remains a worryingly long chain of underachievers, and, in comparison to similar Nordic countries, the quality of the education system has been found wanting. As we have revealed, however, this is not the whole story.

We also found that in 2003, by international standards, young Norwegian adults had good literacy skills, with few poor performers. We appreciate that the evidence is complex and ambiguous, but this finding nevertheless suggests that there are substantial underlying strengths in the Norwegian approach to education and learning which it would not be sensible to lose. One possibility is that a *patient* approach to learning yields more rewards in the long term among young adults than among school pupils. This should not be grounds for complacency: necessary reforms need to be pursued, but it does mean that some caution is required so that the real weaknesses of the Norwegian system can be rectified without damage being inflicted on all its positive aspects. The last thing we would wish is the Report to be used to improve performance and equity at age 15 at the cost of turning pupils off learning and thus creating a less well-educated adult population and, ultimately a less equitable society.

Herein lies the challenge for those involved with Norwegian education: is it possible to achieve the improvements deemed necessary by us without damaging the system? In order for this to happen, in our view, there has to be concerted action by all involved with the education system. The Government cannot do it by itself. It needs to work with the local authorities, the teachers' and pupils' unions' and the parents If these various parties can cooperate along the lines we have suggested – finding appropriate Norwegian solutions to the problems we have outlined - we are confident that much can be achieved and the system both improved and made even more equitable. We trust Norwegian society would value this. We are certain that future generations of Norwegian pupils deserve it.

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ANNEX 1: STATISTICAL APPENDIX

Table A3.1 Expenditure on Educational Institutions per Student (2000)

Country	Primary	L/second	U/second	Tertiary	Prim - Tertiary
Norway	**6550**	**8185**	**8925**	**13353**	**8333**
Denmark	7074	7222	8164	11981	8302
Finland	4317	6737	5641	8244	6003
Sweden	6336	6238	6411	15097	7524
OECD	**4381**	**5573**	**6063**	**9571**	**5736**

Note: Annual expenditure on educational institutions per student in equivalent US dollars using purchasing power parities (PPPs)

Source: OECD 2003a, tables B1.1, p.197

Table A3.2 Student-teacher ratios

Country	Primary	Lower secondary	Upper secondary
Norway	**11.5**	**10.3**	**9.2**
Denmark	10.9	m	14.2
Finland	15.8	10.6	16.0
Sweden	12.5	12.2	14.1
OECD	***16.6***	***14.4***	***13.1***

Source: OECD 2004a, table D2.2, p. 377

Table A3.3 Teachers' salaries in lower secondary education after 15 years experience expressed as a ratio to GDP per capita

Country	Ratio to GDP per capita
Norway	**0.86**
Denmark	1.23
Finland	1.38
Sweden	1.01
OECD	***1.37***

Source: OECD 2004a, table D3.1, p. 390

Table A3.4 Mean Performance and Standard Deviation on Reading Scales in 2003

Country	PISA 2003	Standard Deviation
Norway	**500**	**104**
Denmark	492	98
Finland	543	89
Sweden	514	92
OECD	***494***	***100***

Source: OECD 2004, table 6.2, p. 444

Table A3.5 Percentage of Girls at or above Reading Level 5 in 2003

Country	PISA 2003
Norway	**13.7**
Denmark	6.5
Finland	20.5
Sweden	15
OECD	***10.6***

Source: OECD 2004, table 6.5, p. 447

Table A3.6 Percentage of Boys at or above PISA Reading Level 5 in 2003

Country	PISA 2003
Norway	**6.2**
Denmark	3.8
Finland	8.8
Sweden	7.8
OECD	***6.1***

Source: OECD 2004, table 6.5, p. 447

Table A3.7 Percentage of Girls at or below Reading Level 1 in 2003

Country	PISA 2003
Norway	**11.3**
Denmark	12.7
Finland	2.4
Sweden	8.7
OECD	***13.8***

Source: OECD 2004, table 6.5, p. 447

Table A3.8 Percentage of Boys at or below Reading Level 1 in 2003

Country	PISA 2003
Norway	**24.8**
Denmark	20.5
Finland	9
Sweden	17.7
OECD	***24.2***

Source: OECD 2004, table 6.5, p. 447

Table A3.9 Average Distances between Mean Score and Lowest Percentiles in Reading (Girls & Boys) in 2003

Country	PISA 2003
Norway	**179**
Denmark	154
Finland	143
Sweden	165
OECD	***176***

Source: OECD 2004, table 6.2, p. 444

Table A3.10 Distances between 75th and 25th Percentiles in Reading point scores for all OECD countries in PISA

2003 Rank in terms of average point score	Country	Difference between 75th & 25th percentiles
1	Finland	105
2	Korea	106
3	Denmark	115
4	Ireland	117
5	Canada	118
6	Netherlands	122
7	Turkey	123
8	Hungary	124
9	Portugal	126
10	Switzerland	126
11	Czech Republic	127
12	Poland	127
13	Slovak Republic	127
14	Spain	127
15	France	129
16	Iceland	129
17	Sweden	129
18	Australia	130
19	Mexico	132
20	Luxembourg	135
	OECD Average	**135**
21	Italy	136
22	**Norway**	**137**
23	United States	139
24	Greece	140
25	Austria	142
26	Japan	142
27	New Zealand	143
28	Belgium	147
29	Germany	153

Source: OECD 2004, table 6.2, p. 444

Table A3.11 Mean Performance and Standard Deviation on Mathematical Literacy Scales (Girls & Boys) in 2003

Country	PISA 2003	Standard Deviation
Norway	**495**	**92**
Denmark	514	91
Finland	544	84
Sweden	509	95
OECD	***500***	***100***

Source: OECD 2004, table 2.5c, p. 356

Table A3.12 Percentage of Girls & Boys at or above Mathematics Level 5 at PISA 2003

Country	Girls	Boys
Norway	**9.6**	**13.2**
Denmark	13.9	18
Finland	20.8	25.9
Sweden	14.3	17.3
OECD	***12.4***	***16.9***

Source: OECD 2004, table 2.5b, p 355

Table A3.13 Percentage of Girls & Boys at or below Mathematics Level 1 at PISA 2003

Country	Girls	Boys
Norway	**21**	**20.6**
Denmark	17.4	13.4
Finland	6.3	7.4
Sweden	17..9	16.7
OECD	***22.2***	***20.7***

Source: OECD 2004, table 2.5b, p. 355.

Table A3.14 Distances between Mean Scores and Lowest Mathematics Achievers in 2003

Country	PISA 2003
Norway	179
Denmark	154
Finland	143
Sweden	165
OECD	***176***

Source: OECD 2004, table 2.5c, p. 356

Table A3.15 TIMSS Mathematics Grade 8 Country Mean Scores for Girls & Boys and International Benchmarks

Country	Mean	Girls Mean	Boys Mean	% Adv/High	% Low
Norway	**461**	**463**	**460**	**10**	**81**
Sweden	499	499	499	24	91
Singapore	605	611	601	77	99
South Africa	264	262	264	02	10
International. Average	**467**	**467**	**466**	**23**	**74**

Source: Mullis et al. (2004) TIMSS International Mathematics Report, pp. 34 -64.

Table A3.16 TIMSS Mathematics Grade 4 Country Mean Scores for Girls & Boys and International Benchmarks

Country	Mean	Girls Mean	Boys Mean	% Adv/High	% Low
Norway	**451**	**449**	**454**	**10**	**75**
Sweden	-	-	-	-	-
Singapore	594	599	590	73	97
Tunisia	339	342	337	01	28
International. Average	**495**	**495**	**496**	**33**	**82**

Source: Mullis et al. (2004) TIMSS International Mathematics Report, pp. 34 - 64.

Table A3.17 Average Distances between 75th and 25th Percentiles in mathematics point scores for all OECD Countries in PISA 2003

2003 Rank in terms of average point score	Country	Difference between 75th & 25th percentiles
1	Finland	115
2	Ireland	117
3	Mexico	117
4	Canada	119
5	Hungary	120
6	Portugal	120
7	Spain	120
8	Iceland	124
9	Denmark	125
10	Poland	125
11	France	126
12	Greece	126
13	Korea	127
14	Luxembourg	127
15	**Norway**	**127**
16	Slovakia	129
17	Italy	130
18	Sweden	*130*
19	Australia	132
20	Austria	132
21	Switzerland	132
22	United States	132
23	Turkey	134
24	Czech Republic	135
25	Netherlands	137
26	Japan	138
27	New Zealand	138
	OECD average	***139***
28	Germany	146
29	Belgium	157

Source: OECD 2004, table 6.6, p. 448

Table A3.18 Mean Performance and Standard Deviation on Scientific Literacy Scale (Girls & Boys) in 2000 & 2003

Country	PISA 2000	Standard Deviation	PISA 2003	Standard Deviation
Norway	**500**	**96**	**484**	**104**
Denmark	481	103	475	102
Finland	538	86	548	91
Sweden	512	93	506	107
OECD	***500***	***100***	***500***	***105***

Source: OECD 2004, table 6.6, p. 448

Table A3.19 Proportion of Girls & Boys at or above 600 points in Science at PISA 2003

Country	Girls	Boys
Norway	**11.9**	**13.9**
Denmark	9.3	12.4
Finland	29.2	29.2
Sweden	18.7	20.3
OECD	***16***	***19.3***

Source: OECD 2004, table 6.8, p. 450

Table A3.20 Proportion of Girls & Boys at or below 400 points in Science at PISA 2003

Country	Girls	Boys
Norway	**20.5**	**22**
Denmark	24.7	20.6
Finland	4.6	6.9
Sweden	16.6	15.7
OECD	***17.7***	***18***

Source: OECD 2004, table 6.8, p. 450

Table A3.21 Distance between Mean Scores and Lowest Science Achievers in 2003

Country	PISA 2003
Norway	172
Denmark	169
Finland	155
Sweden	179
OECD	***176***

Source: OECD 2004, table 6.6, p. 448

Table A3.22 TIMSS Science Grade 8 Country Mean Scores for Girls & Boys and International Benchmarks

Country	Mean	Girls Mean	Boys Mean	% Adv/High	% Low
Norway	**494**	**490**	**498**	**21**	**91**
Sweden	524	521	528	38	95
Singapore	578	576	579	66	95
South Africa	244	242	244	03	13
International. Average	**474**	**471**	**477**	**25**	**78**

Source: Martin et al. (2004) TIMSS International Science Report, pp. 36 - 64.

Table A3.23 TIMSS Science Grade 4 Country Mean Scores for Girls & Boys and International Benchmarks

Country	Mean	Girls Mean	Boys Mean	% Adv/High	% Low
Norway	**466**	**467**	**466**	**15**	**79**
Sweden	-	-	-	-	-
Singapore	565	565	565	61	95
Morocco	304	306	303	01	24
International. Average	**489**	**489**	**488**	**30**	**82**

Source: Martin *et al*. (2004) TIMSS International Science Report, pp. 36 - 64.

Table A3.24 Average Distances between 75th and 25th Percentiles in science point scores for all OECD Countries in PISA 2003

2003 rank in terms of average point score	Country	Difference
1	Mexico	115
2	Finland	123
3	Turkey	125
4	Portugal	128
5	Iceland	130
6	Ireland	130
7	Austria	133
8	Hungary	135
9	Canada	136
10	Korea	136
11	Spain	136
12	Slovak Republic	138
13	Australia	139
14	Denmark	140
15	Greece	140
16	Czech Republic	141
17	Luxembourg	143
18	**Norway**	**143**
19	Poland	144
20	United States	144
21	Sweden	146
22	Italy	148
23	Netherlands	148
24	New Zealand	148
25	Switzerland	148
	OECD average	*148*
26	Japan	149
27	Belgium	152
28	France	156
39	Germany	157

Source: OECD 2004, table 6.6, p. 448

Table A3.25 Percentages of Girls & Boys at-or-below Level 1 and at-or-above Level 3 in Problem Solving in PISA 2003

Country	At-or-below Level 1	*At-or-above Level 3*
Norway	**52**	**15**
Denmark	40	20
Finland	27	30
Sweden	44	17
OECD	***47***	***18***

Source: OECD 2004b ('Problem Solving for Tomorrow's World; First Measures of Cross Curricular Competencies from PISA 2003'), table 2.1, p. 144

Table A3.26 % Pupil Responses to questions about their attitudes

Country	I think school is a waste of time	I feel I belong	I make friends easily
Norway	**11**	**85**	**90**
Denmark	7	69	88
Finland	7	89	88
Sweden	7	81	88
OECD average	**8**	**81**	**89**

Source: OECD 2004, figures 3.4; 3.5 pp. 126,129

Table A3.27 Attitudes toward school

Country	Index score
Norway	**-0.21**
Denmark	-0.03
Finland	0.11
Sweden	0.02
OECD average	**0.00**

Source: OECD 2004, table 3.4 p. 367

Table A3.28 Attitudes towards a Sense of belonging

Country	Index score
Norway	**0.24**
Denmark	0.01
Finland	-0.02
Sweden	0.25
OECD average	**0.00**

Source: OECD 2004, table 3.5a. p. 368

Table A3.29 Pupils' Perceptions of Pupil Behaviour

Country	% Cannot work well 2003	% Reporting Long Delays 2003
Norway	**28.3**	**36.1**
Denmark	19.7	26.9
Finland	18.8	32
Sweden	19.9	28.4
OECD	**23.5**	**29.3**

Source: OECD 2003a, table 5.3b. p.409

Table A3.30 % of pupils in schools where head teachers report that learning of students is to some extent hindered by disruption of classes by students

Country	% pupils in classes with disruption 2003
Norway	**73.8**
Denmark	41.7
Finland	38.5
Sweden	50.4
OECD	**40**

Source: OECD 2003a, tables 5.2b. p.407

Table A3.31 % of pupils in schools where head teachers report that learning of students is to some extent hindered by pupils' lack of respect for their teachers

Country	2003
Norway	**35.5**
Denmark	12.5
Finland	12.4
Sweden	25.2
OECD	**22**

Source: OECD 2003a, tables 5.2b. p.407

Table A3.32 % of pupils in schools where head teachers report that learning of students is to some extent hindered by Poor Teacher/Pupil Relations

Country	2003
Norway	**22.3**
Denmark	4.9
Finland	14
Sweden	10.9
OECD	**16.7**

Source: OECD 2003a, tables 5.4b. p.411

Table A3.33 Percentage of Population with at least Upper Secondary Education (2001)

Country	Age Group 25-64
Norway	**87**
Denmark	81
Finland	76
Sweden	82
OECD	**66**

Source: OECD 2005, Education at a Glance, table A1.2a. p. 36

Table A3.34 Participation in Life-long Learning: percentage of adult population

	Country	Participated in learning	Would like to participate	Not interested
1	Denmark	56.2	15.6	15.4
2	Finland	53.3	10.9	22.3
3	Sweden	51.9	19.2	17.4
4	Iceland	48.9	14	6.2
5	**Norway**	**41.7**	**15.7**	**17.5**
6	Netherlands	41.5	17.6	25
7	UK	39.6	14.2	33.2
8	Austria	35.5	14.2	31.9
9	Ireland	35	13.9	38.5
10	Luxembourg	33.3	14.5	25.3
11	Germany	32	30.6	26.5
	EU average	***31.4***	***20.2***	***34.9***
12	Belgium	28.7	11.8	40.8
13	Spain	28.2	16.6	46.5
14	Italy	26.8	19.8	35.8
15	France	24.2	18.3	43.7
16	EL	17.7	25.5	42.6
17	Portugal	11.9	18.2	49.7

Note: the columns do not add up to 100 as other reasons could be given.

Source: CEDEFOP 2003, Eurobarometer Survey

Table A3.35 Adult Literary Survey - Prose Means and Standard Deviations for all Participating Countries

	Country	**Mean**	**SD**
1	Sweden	301.3	11.9
2	Finland	288.6	27.9
3	**Norway**	**288.5**	**16.9**
4	Netherlands	282.7	30
5	Canada	278.8	10
6	Germany	275.9	11.2
7	New Zealand	275.2	19.1
8	Denmark	275	14.9
9	Austria	274.2	25.5
10	USA	273.7	10.4
11	Belgium – Flanders	271.8	30
12	Czech Republic	269.4	28.5
13	UK	266.7	29.2
14	Ireland	265.7	19.8
15	Switzerland – French	264.8	12.3
16	Switzerland - Italy	264.3	21.3
17	Switzerland –German	263.3	10.5
18	Hungary	242.4	18.1
19	Slovenia	229.7	25.9
20	Poland	229.5	15.3
21	Portugal	222.6	18.7
22	Chile	220.8	21

Source: OECD 2000 Literacy in the Information Age: Final Report of the International Adult Literacy Survey, table 2.1, pp. 135-136

Table A3.36 Adult Literary Survey - Documentation Means and Standard Deviations for all Participating Countries

Rank	Country	Mean	SD
1	Sweden	305.6	11.6
2	**Norway**	**296.9**	**15.1**
3	Denmark	293.8	19.5
4	Finland	289.2	19.7
5	Netherlands	286.9	29.3
6	Germany	285.1	17.8
7	Czech Republic	282.9	18
8	Canada	279.3	11.7
9	Belgium – Flanders	278.2	30
10	Switzerland – French	274.1	10.6
11	Australia	273.3	26.6
12	Switzerland - Italy	271.0	25.6
13	Switzerland –German	269.7	7.8
14	New Zealand	269.1	15.7
15	USA	267.9	15.8
16	UK	267.5	30
17	Ireland	259.3	14
18	Hungary	249	19.2
19	Slovenia	231.9	21.5
20	Poland	223.9	11.2
21	Portugal	220.4	23.5
22	Chile	218.9	20

Source: OECD 2000 Literacy in the Information Age: Final Report of the International Adult Literacy Survey, table 2.1, pp. 135-136

Table A3.37 Adult Literary Survey – Quantification Means and Standard Deviations for all Participating Countries

Rank	Country	Mean	SD
1	Sweden	305.9	8.9
2	Denmark	298.4	19.3
3	Czech Republic	298.1	21.4
4	**Norway**	**296.8**	**17.4**
5	Germany	293.3	9
6	Netherlands	287.7	30
7	Finland	286.1	21.7
8	Belgium – Flanders	282.0	30
9	Canada	281	7.8
10	Switzerland – French	280.1	15.8
11	Switzerland –German	278.9	9.9
12	Australia	275.9	28.7
13	USA	275.2	17.2
14	Switzerland - Italy	274.4	30
15	New Zealand	270.7	22.3
16	Hungary	269.9	14.1
17	UK	267.2	30
18	Ireland	264.6	20.5
19	Slovenia	242.8	21
20	Poland	234.9	12.8
21	Portugal	231.4	22.5
22	Chile	208.9	18.3

Source: OECD 2000 Literacy in the Information Age: Final Report of the International Adult Literacy Survey, table 2.1, pp. 135-136

Table A3.38 Comparison of Reading in PISA and IALS

	PISA 2003 reading scale: 15 year olds			**IALS 1994 – 98 document scale: those aged 16 - 25**	*ALL 2003 document scale: those aged 16 – 25*		
	Mean score	Score difference between 25th and 75th percentile	% at and below level 1 on scale	*mean score*	mean score	Score difference between 25th and 75th percentile	% at level 1 on scale
Norway	**500**	**143**	**18**	***307***	**308**	**58**	**5**
Canada	528	136	10	*305*	291	61	10
Italy	476	148	24		241	71	39
Switzerland	499	148	17	*299*	291	62	9
United States	495	144	19	*274*	275	66	16
OECD average	**494**	**148**	**19**				

Source: Learning for tomorrow's world, OECD 2004, table 6.1, 6.2 pp. 443- 444

Table A3.39 Comparison of 20 – 24 year-olds and 25 – 64 year-olds*

	Those aged 20 – 24. % of total not in education and without upper secondary qualification	***Those without upper secondary qualification aged 25 – 64 Participation rate in continuing education and training during one year***
Norway	**4.3***	**26**
Canada	10.9	12
Denmark	16.8	36
Finland	9.2	36
Italy	25.2	9
Sweden	9.2	36
Switzerland	7.5	20
United States	12.3	24
OECD average	**19.0**	

Sources: Education at a Glance (OECD, 2004), table C5.1, pp. 350 – 351(*Norway data updated and corrected with data for 2002, published in Education at a Glance 2005); Education at a Glance, 2002, table C4.1, p. 251

Table A3.40 PISA mathematics and ALL numeracy

	PISA 2003 maths scale: 15 year olds			*ALL 2003 numeracy scale: those aged 16 – 65*	
	Mean score	**Score difference between 25th and 75th percentile**	**% at and below level 1 on scale**	**document scale those aged 16 – 25: mean score**	**Score difference between 25th and 75th percentile**
Norway	**483**	**142**	**25**	**285**	**61**
Canada	518	130	11	272	75
Italy	470	147	37	233	67
Switzerland	540	149	18	290	64
United States	472	134	25	261	80
OECD average	**496**	**151**	**27**		

Sources: Learning for tomorrow's world, OECD, table 2.1c, 2.1d, pp. 342, 343- 444; ALL report, 2005, table 2.7***a.***

Table A4.1 Head Teachers' Perceptions of Teachers' Attitudes

Country	% Teachers with Low Expectations 2003
Norway	**20.4**
Denmark	9.1
Finland	6.7
Sweden	11.5
OECD	**22.1**

Source: OECD 2003a, table 5.4b. p.411

ANNEX 2: DIFFERENT TYPES OF TESTING

Testing for qualifications

1. One of the first formal systems of testing began in England during the 1800s. Universities and various professions, including the civil service, adopted written examinations as a more acceptable alternative to the widespread patronage that had previously been used to distribute jobs and opportunities. This kind of testing is still common today: road users are tested on driving skills and most professions use written examinations as an integral part of the qualifications needed in order to practice.

2. Tests for qualifications are designed to suit the need of modern societies for reliable credentials. Thus, the criteria for drivers' licenses are usually set high enough to ensure the safety of the entrant and of other road users but low enough to enable most of the population to pass (though with varying amounts of tuition and practice). On the other hand, the test criteria to qualify as an air force pilot, a brain surgeon or a specialist lawyer will usually be set very high and can only be passed after a great deal of preparatory work by people with appropriate high-level skills.

Testing for competitive entrance examinations

3. A different form of testing is used by elite institutions wishing to restrict the numbers of their entrants. In these cases, the tests may simply be used to identify the most able of the potential candidates within a narrowly prescribed band. In this case, the pass rate would be likely to be low.

Testing as a part of the learning process

4. This is the most common form of testing. It is often called formative testing when the pupil is critically involved in the process. It usually takes place on an informal basis in classrooms and homes. Learners, seeking to check whether they have memorised or comprehended particular information and grasped its implications, will endeavour to reproduce the information or demonstrate their understanding of it. The teacher who informally questions his or her pupils and then provides them with accurate feed-back is also drawing on this form of testing as part of the learning activity. With this use of testing it seldom matters if the pass rate is high or low as it does not have the same significance as in the other cases; the test is an integrated part of the learning.

Testing as a way to judge teachers and schools

5. A number of countries have adopted policies which draw on the test results of pupils to estimate the quality of teachers and the achievement of schools. In some countries ministries have published league tables based on schools' pass rates. In others, despite official disapproval, league tables have been constructed by newspapers or television programme makers.

Testing as a way to monitor national progress

6. It is possible – and an efficient use of resources - to monitor the progress over time of a country through the use of the systematic testing of a sample of pupils and schools. This is the way in which PISA data are collected. It is a method used in England during the 1980s to monitor progress in mathematics, science and modern foreign languages. A form of it is also used to monitor progress in Finland.

ANNEX 3: OECD REVIEW TEAM

Mr. Peter Mortimore (Rapporteur)	Former Director of the Institute of Education and Pro-vice-chancellor of the University of London
Mr. Simon Field	Education and Training Policy Division, Directorate for Education (EDU), OECD, Paris, France
Ms. Beatriz Pont	Education and Training Policy Division, Directorate for Education (EDU), OECD, Paris, France

ANNEX 4: PROGRAMME OF THE VISIT

15-25 November 2004

Tuesday 16 November - Oslo

9.00 *Meeting with Deputy Minister, Secretary General and Director Generals of the Ministry:*

Helge Ole Bergesen, Deputy Minster
Trond Fevolden, Secretary General
Dag Thomas Gisholt, Acting Director General, the Department or Learning and Workforce Development
Eivind Heder, Director General, the Department for Analyses and International Affairs
Toril Johansson, Director General, the Department for Higher Education
Johan Raaum, Director General, the Department of Education and Training

11.00 *Meeting with the Department of Education and Training:*

Johan Raaum, Director General, Department of Education and Training
Tove Brekke, Deputy Director General, the Department of Education and Training
Gunnar Mandt, Deputy Director General, Section for Educational Content and Development,
Lars Rime, Assistant Director General, Legal Affairs Section
Margaret Westgaard, Deputy Director General, Economic Affairs Section,
Gry Aalde, Deputy Director General, Section for Documentation and Analysis,
Ida Drage, Assistant Director General, Section for Educational Content and Development
Siv Merethe Lien, Adviser, Section for Educational Content and Development
Fride Tangen, Senior Adviser, Section for Documentation and Analysis

12.00 - 18.00 *Meetings in the Directorate for Primary and Secondary Education:*

Responsible for the programme: Anne Berit Kavli, Head of Department for Documentation

12.00 *Welcome by Anne-Berit Kavli, Head of Department of Documentation*

12.10 *Norwegian Educational System and National Quality System:*

Anne-Berit Kavli, Head of Department of Documentation
Kari Korbøl, Adviser
Sissel Anderson, Adviser

12.40 *Follow up, White Paper no.30:*

John Christian Christiansen, Adviser

13.00 *Equity, Minorities and Adapted and Inclusive Education, Special Needs Education- the support system with focus on The Educational Psychological Service:*

Marit Hognestad, Adviser

13.40 *Informal meeting with Anne-Berit Kavli, Head of Department for Documentation and Laila Fossum Head of Department for Educational Content*

14.30 *Equal Education in Practice – Strategic Plan 30:*

Randi Natvig, Adviser
Vibeke Thue, Adviser
Helga Arnesen, Head of Department of Minorities, The Norwegian Institute for Adult Learning (Vox)

15.30 *Employment Guidance and Drop-Outs:*

Lone Lønne Christiansen, Adviser

16.30 *Campaign against Bullying and Racism:*

John Hege Knudsmoen, Adviser
Peder Stokke, Adviser

17.00 *Special challenges in Lower Secondary Schools:*

Sissel Anderson, Adviser

Wednesday 17 November - Oslo

09.00 – 17.00 *School Visits in Oslo and meeting with the Minister of Education and Research:*

Ine Kjølstad Sander, Adviser from the Directorate of Primary and Secondary Education and Kjell Richard Andersen, Deputy Director from the Education Authority in Oslo will accompany the OECD review team during its visits to the schools in Oslo.

09.00 *Meeting with:*

Kjell Richard Andersen, Deputy Director of the Education Authority in Oslo
Elin Reite, Director of Department for Education
Torbjørg Pleum, Regional Director (one of six Regional Directors)
Tordis Eriksen, Director of Department for Vocational Training
Signe Marie Natvik Andreassen, Headmaster from Gran Primary School

10.15 *Visit to Jordal Lower Secondary School:*

Leif Østli, Headmaster
Tonje Hellstrøm, Deputy Headmaster

10.45 *Meeting with teachers:*

Mattis Eika
Christer Wibe
Trude Myrvold
Rehana Quresti

Meeting with pupils:

Juned Z. Malik, 10B
Mira B. Refsum, 10a
Emil S. Jensen, 9A
Stian S. Seland, 9A
Melodi Filiz, 8B
Ella Stokk, 8B
David T Nguyen, 8 B

12.30 – 14.30 *Visit to Stovner Upper Secondary School:*

12.30 *Meeting with the leader group:*

Bjørn Croff, Headmaster
Anne Omland, Deputy Headmaster
Arvid Helland, Deputy Headmaster
Patrick Stark, Deputy Headmaster
Kari Pillgram Hansen, Adviser
Villy Storborg, Assistant Headmaster and Pål Trodal, Adviser from Haugenstua Lower Secondary School

13.30 *Meeting with teachers:*

Kari Wisløff
Hege Gundersen
Hans Leganger
Aud Foss
Karin Karlsson
Henning Slettevold

14.00 *Meeting with pupils:*

Ayan Sheikh Mohamed
Kaweh Almassy
Waqar Malik
Siri Støre
Elisabeth Johansen
Valentina Paulic

15.00 *Meeting with the Minister, Deputy Minister, Secretary General and Director Generals:*

Kristin Clemet, Minister
Helge Ole Bergesen, Deputy Minister
Trond Fevolden, Secretary General
Eivind Heder, Director General, the Department for Analyses and International Affairs
Toril Johansson, Director General, the Department for Higher Education
Johan Raaum, Director General, the Department of Education and Training
Anne Line Wold, Adviser, the Department of Learning and Workforce Development

Thursday 18 November - Oslo

09.00 – 11.30 *Meeting at Oslo University College*

09.00 *Meeting with The National Centre for Multicultural Education, Oslo University College:*

Liv Bøyesen, Adviser
Sunil Loona, Adviser

09.30 *Recruitment and retention of ethnic minority students in higher education:*

Sharam Alghasi, project leader at the MIFA- project (Focus on Ethnic Minorities in Higher Education) University of Oslo
Ida Marie Andersen, project leader at the MIP-project (Minorities in Professional Study Programmes) Oslo University College
Sissel Østberg, Dean at the Teacher training in a multicultural society, Oslo University College
A student attending the BA-program in bilingual teacher training

12.30 *Meeting with NIFU's reference group for the "equity-project":*

Berit Lødding
Vibeke Opheim
Per Olaf Aamodt
Liv Anne Støren
Petter Aasen

14.15 – 18.15 *Meetings with organisations*

14.15 *Meeting with the National Union of Students in Norway and the School Student Union of Norway:*

Norsk Studentunion – NSU (The National Union of Students in Norway) is an organization for all students at the universities and scientific colleges in Norway. NSU represent approximately 75 000 students.

Marianne Torp, Vice President
Linda Ellingsen
Jon Ivar Thomsen Eikeland, Responsible for Student Affairs

Elevorganisasjonen (The School Student Union of Norway) is the organisation that works for the common welfare and interest of secondary school students and trainees in Norway

Magnus Nystrand
Solveig Tesdal

15.15 *Meeting with Utdanningsforbundet (Union of Education Norway) - Norway's largest trade union for teaching personnel):*

Inger Lise Blyverket, Member of Executive Board
Terje Vilno, Deputy Head, at the of Education Regional Office in Oslo
Agneta Bolinder, Secretariat
Inger Marie Smidt, Tøyen Primary School in Oslo, head of the Unions commitee for migration pedagogy in school

16.15 *Meeting with Kontaktutvalget mellom innvandrere myndighetene - KIM (The Contact Committee for Immigrants and the Authorities) is a government appointed advisory body consisting of representatives from immigrant organizations, political parties and relevant governmental agencies and ministries):*

Rita Kumar, Head of KIM
Yousuf Gilani , Member of KIM's Immigrant Forum (IF)
Hilde Roald, Adviser in the Secretariat of KIM
Steven Meglitsch, Adviser in the Secretariat of KIM

17.15 *Meeting with Næringslivets Hovedorganisasjon - NHO (Confederation of Norwegian Business and Industry):*

Baard Meidell Johannesen, Director

Meeting with Landsorganisasjonen i Norge - LO (The Norwegian Confederation of Trade Unions)

Nina Tangnes Grønvold, Head of Department
Grethe Moe, Adviser

Friday 19 November 2004 - Oslo

09.15 – 12.00 *Meetings with representatives of other ministries*

09.15 *Meeting with Barne og familiedepartementet – BFD (Ministry of Children and Families Affairs):*

Eli Sundby, Deputy Director General, Department of Family, Daycare services and Gender Equality
Kristina Kvåle, Adviser
Hege Nordstrand, Adviser
Tone Sollien, Senior Adviser, the Department for Analyses and International Affairs

10.15 *Meeting with Kommunal og regionaldepartementet –KRD (Ministry of Local Government and Regional Development):*

The Department of Migration:

Stephan G. Mo, Deputy Director General
Kari Framnes, Adviser
Eva Tuv, Adviser

The Department of Local Government:

Grete Lilleschulstad , Senior Adviser
Erlend Nordby, Senior Executive Officer

The Department of Saami and Minority Affairs:

Bjørn Olav Megård, Adviser

11.15 *Meeting with Arbeids - og sosialdepartementet – ASD (Ministry of Labour and Social Affairs)*

Per Brannsten, Director General, Aetat
Marte Kristine Bjærtnes, Adviser
Anna Fanebust, Adviser

12.30 – 18.00 *Meetings with other organisations and researchers*

13.30 *Meeting with Foreldreutvalget for grunnskolen - FUG (National Parents Committee for Lower and Secondary Education in Norway):*

Loveleen Rihel Brenna, President
Grete R. Reinemo, Head of Secretariat
Whyn Lam, Project Co-ordinator

14.15 *Meeting with Statistisk Sentralbyrå – SSB (Statistics Norway):*

Kjetil Digre, Adviser
Geir Nygård, Adviser

15.15 *Visit from the Norwegian Institute for Adult Learning (Vox):*

Torbjørn Bergane, Deputy Director, Vox
Grethe Haugøy, Advisor, Vox
Anne Skomedal, Senior Adviser, Ministry of Education and Research

Monday 22 November - Oslo

09.00 *Meeting with Kommunenes Sentralforbund - KS (The Norwegian Association of Local and Regional Authorities):*

Eva Lian

10.00 *Meeting with the Department for Higher Education of the Ministry:*

Toril Johansson, Director General
Kari Østvedt, Deputy Director General
Berit Johnsen, Senior Adviser

11.00 *Meeting with the Department of Learning and Workforce Development:*

Dag Thomas Gisholt, Acting Director General
Siv Hilde Lindstrøm, Deputy Director General
Hildrun Tyldum, Senior Adviser

12.30 *Round table discussion meetings with researchers (UiO/HiO):*

Institutt for lærerutdanning og skoleutvikling (ILS) – Department of Teacher Education and School development:

Astrid Roe
Rolf Vegard Olsen
Heidi Leganger - Krogstad
Fred Carlo Andersen

Institutt for spesialpedagogikk (ISP) Department of Special Needs Education:

Kjell skogen
Eva Simonsen
Liv Randi Opdal

Pedagogisk forskningsinstitutt (PFI) – Institute for Educational Research:

Ola Stafseng
Asbjørn Birkmo

17.00 *Meeting with Margreth Olin, film director and creator of the film "Ungdommens råskap" and actors*

18.00 *Meeting with representatives of immigrant organizations:*

Daniel Gemtessa, KIM-Afrika
Mohammad Anwar Soofi, KIM Asia

Tuesday 23 November – Hamar Municipality

OECD team accompanied by Marit Hognestad, Advisor in the Directorate of Primary and Secondary Education and Per Kristian Andersen from The County Governor in Hedmark

09.10 *Meeting at Børstad Lower Secondary School:*

Jan Stensrud, Headmaster
Egil Reinemo, Deputy Headmaster
Tor Reinemo Head of Department
Nelly Vestad, International Co-ordinator
Einar Busterud, Mayor of Hamar Municipality
Svein Skarås, Director of Hamar Municipality
Anne Grete Melby, Head of the Education Authority in Hamar

09.25 *Hamar Municipality and the management of Børstad Lower Secondary School will take questions from the OECD team.*

10.30 *Meeting with teachers at Børstad Lower secondary School:*

Marit Grønsveen
Bjørn G. Hansen
Richard MacLeod
Mona Søyland
Mette Flermoen
Nelly Vestad, International co-ordinator

12.15 *Meeting with pupils*

Representatives from the Student Board:

Mathias Bergum
Elisabeth Kristiansen
Eirik Falk Eriksen
Ingeborg V. Øveraasen
Helge Moen Ree

13.30 *Meeting at Storhamar Upper Secondary School (vocational orientated school):*

Gro Lindgaard Aresvik, Director
Tore Gregersen, Headmaster
Jannicke Langseth, Manager of Education
Dagny Mills, Manager of hotel study and food processing trades.

14.15 *Meeting with pupils:*

Aleksander Iversen, VK1
Sofie Frohe, VK1
Yvonne Fjestad, GK
Lars Thomassen, GK
Camilla Lien Fagerlund, VK1

14.45 *Meeting with teachers:*

Herbert Svensson
Tove Haaberg
Henning Jensen
Gerd Vasåsen
Jørn Engen
Odd Arne Ruud
Bjørg Hoel
Helga Hjeltnes

15.15 *Meal with county officials and the school management*

16.00 *Meeting with Educational Psychological Counselling Service and the Counselling Management – focus on lower secondary education:*

Anne Grete Melby, Head of the Education Authority in Hamar Director
Mette Kvalsvik, Head of Educational Psychological Service
Eva Lassen Stenberg, Adviser
Einar Magne Eriksen, Adviser
Hilde Olsrud, Adviser

Wednesday 24 November - Hamar

9.15 *Meeting at Greveløkka Primary School:*

Sissel Bakke Tvedten, Headmaster
Anne Grete Melby, Head of the Education Authority in Hamar

10.15 *Meeting with pupils:*

Maren S Rullestad
Martin Kvam
Egzon Beqiri
Fredrik Sjølstad
Tengel Ekrem Skar
Tinoosh Rashedi
Judy Phuong Nguyen
Gjermund Hagen

11.15 *Meeting with teachers:*

Andreas Flagstad, Contact teacher
Astrid Wictorsen, in charge of special education
Marit Øyen, contact teacher, head of primary level forms (1.st- 4th forms)
Bjørn Teistung, Head of primary level forms, contact teacher, co-ordinator of special education
Gunilla Odberg, Coordinator migration pedagogic/contact teacher and ICT contact

12.00 *Lunch at Greveløkka School*

12.15 *Meeting at Hedmark University College - teacher-training department:*

Per Ivar Kvammen, Vice Dean

13.45 *Meeting with students:*

Bente Pedersen-Kienlien, Multicultural education, 30 ETCS
Pernille Jensen, Kindergarten teacher education, Bachelor (Second year)
Bihayo Kashandi, Teacher training education for bilingual teachers (Bachelor, first year)
Hilde Berg, General teacher education, 240 ETCS (Second year)
Ingvild Øiamo ,General teacher education, 240 ETCS, (Second year)
Kristian Aasen, General teacher education, 240 ETCS, (Second year)

14.45 *Meeting with college teaching staff:*

Thor Ola Engen, Professor
Sigrun Sand, Associate Professor
Joar Åsen, Associate Professor
Kari Nes,Assistant Professor
Bjørg-Karin Ringen, Project Manger

Thursday 25 November 2004 - Oslo

10.00-12.00 *Meetings in the Ministry*

10.00 *Meeting with pupils involved in the film "Ungdommens råskap":*

Kazim Ceviz, Sogn Upper Seconadry School
Mikal Bøckmann, Elvebakken Upper Secondary school
Daniel Videsjorden
Cristin Riser

11.00 *Meeting with the Minister, Deputy Minister, the Secretary General and Director Generals:*

Kristin Clemet, the Minister
Helge Ole Bergesen, Deputy Minister
Eivind Heder, Director General
Siv Hilde Lindstrøm, Deputy Director General
Johan Raaum, Director General
Berit Johnsen, Senior Adviser

ANNEX 5: TERMS OF REFERENCE FOR COUNTRY VISIT AND COUNTRY NOTE

Background

1. The OECD is currently conducting a thematic review of equity in education. Its aim is to use international comparison to draw conclusions about effective policies bearing on educational equity. It is examining, in particular, issues of socio-economic, ethnic, regional and gender inequity. It is primarily concerned with equality of opportunity, while recognising that relative equality of outcomes is often used as an indicator of equality of opportunity.

2. As part of this activity, a team of four experts will undertake a 10 day visit to Norway. The team will then prepare a report (a 'country note'), including policy recommendations. The country note will be based on the visit, combined with information derived from the analytical report prepared by the Norwegian authorities as part of the OECD activity, and on a wide range of other background material on the Norwegian context. The country note should be designed to be a free-standing published report of value to Norwegian education, while also serving as a contribution to the wider comparative exercise on equity in education in OECD countries.

Subject matter of the country note

3. The note will provide an overall assessment of how well Norway's educational system delivers equity in education, and its capacity to identify and resolve equity problems as they arise. This will entail a wide-ranging overview of Norway's educational system. The visit and the country note will be informed by a set of key equity themes developed to address equity issues in this thematic review. They are attached to this note.

4. In addition, the note will examine two issues important in their own right, and which also represent significant tests of the robustness of the educational system in the face of challenges to equity. They are:

- issues of equity in lower secondary education;
- issues of equity as they affect minority students and the lowest socio-economic strata those living in a less affluent part of Oslo, including both immigrants and others living in that area.

5. In undertaking the review, the team will examine a wide range of other policy issues with potential equity implications. Some issues already identified for examination include:

- quality assessment and evaluation culture at different levels in the educational system;
- whether the transition from lower to upper secondary is too sharp;
- policies on the education of language minorities;

- teacher recruitment, qualifications, and quality;
- access issues in post-compulsory education; and
- the system of cash grants for families not taking up pre-school places.

6. A number of major reforms have recently been announced in Norway but not yet implemented. These include the extensive new proposals entitled 'Culture for Learning' (St.meld nr. 30 – White Paper no 30 to the Parliament), and those on 'Equal education in practice'. The expert team will need to address these reforms when offering policy recommendations, while recognising that they cannot be evaluated at this early stage. The team should aim to identify how well the planned reforms address any policy problems identified and provide constructive advice on the development and evaluation of these reforms.

Key equity themes

Transition, access and selection

- An inclusive approach – at key transition points, and within each phase of education. Access to real quality of learning for all, (rather than second-class education for some people).
- Availability of second-chance regimes, so that failure at any transition point is never irrevocable. This is relevant to access programmes at post-compulsory level, and to transfers within the compulsory system.

Fairness in funding

- Fair allocation of resources, both between institutions and regions, between different phases of education (ECEC/compulsory/post-compulsory), and fairness in how grants and loans for students are determined. This includes fair provision for programmes specially targeted at disadvantaged groups.

An effective political and legal framework

- Political climate and structures – including advocacy and legal structures - which allow group inequities to be challenged and redressed, and, more generally, equity issues to be properly addressed.

Tools to address equity issues systemically

- Availability of information/data on equity problems affecting particular groups, so that equity problems can be identified.
- Mechanisms for co-coordinating the interests of different phases of the education system and different parts of government. In the latter case, this allows issues of equity in education can be tackled in the context of wider social and economic policies.
- The capacity and structures to think through equity problems systemically, across the lifecycle, and devise policy solutions at the systemic level.