

Organisation for Economic Co-operation and Development
Directorate for Education
Education and Training Policy Division

Attracting, Developing and Retaining Effective Teachers

Country Note:

Korea

John Coolahan, Paulo Santiago, Rowena Phair and Akira Ninomiya

April 2004

This report is based on a study visit to Korea in April 2003, and background documents prepared to support the visit. As a result, the report is based on the situation up to that period.

The views expressed are those of the authors and not necessarily those of Korea, the OECD or its Member countries.

TABLE OF CONTENTS

1: INTRODUCTION	4
Purposes of the OECD Review	4
The Participation of Korea	5
Structure of the Country Note	6
2: THE NATIONAL CONTEXT	7
The Political and Economic Context.....	7
The Educational Policy Context.....	9
3: ORGANISATION AND GOVERNANCE OF THE SCHOOL SYSTEM.....	11
Features	11
Strengths and Challenges	12
4: INITIAL TEACHER EDUCATION	15
Features	15
Strengths and Challenges	16
5: CONTINUING PROFESSIONAL DEVELOPMENT OF TEACHERS.....	18
Features	18
Strengths and Challenges	19
6: LABOUR MARKET FOR TEACHERS.....	20
Features	20
Strengths and Challenges	23
7: TEACHERS AT THE WORKPLACE.....	24
Features	24
Strengths and Challenges	26
8: TEACHER’S CAREER STRUCTURE AND INCENTIVES	27
Features	27
Strengths and Challenges	29
9: SCHOOL MANAGEMENT, EVALUATION AND ACCOUNTABILITY	30
Features	30
Strengths and Challenges	30
10: POINTERS FOR FUTURE POLICY DEVELOPMENT	32
Sustaining the Reform.....	32
Improving Initial Teacher Education	33
Supporting the Continuing Professional Development of Teachers	34
Improving the Effectiveness of the Teacher Labour Market.....	36

Supporting Effective Teachers	37
Ensuring a Rewarding and Effective Career	38
11: CONCLUDING REMARKS.....	39
REFERENCES	42
APPENDIX 1: THE OECD REVIEW TEAM	43
APPENDIX 2: NATIONAL CO-ORDINATOR, NATIONAL ADVISORY COMMITTEE, AND AUTHORS OF THE COUNTRY BACKGROUND REPORT	44
APPENDIX 3: PROGRAMME OF THE REVIEW VISIT	45
APPENDIX 4: COMPARATIVE INDICATORS ON TEACHERS	47

1: INTRODUCTION

Purposes of the OECD Review

1. This Country Note on Korea forms part of the OECD activity *Attracting, Developing and Retaining Effective Teachers*. This is a collaborative project to assist the design and implementation of teacher policies to improve teaching and learning in schools
2. The activity was launched in April 2002. OECD Education Ministers placed great importance on teachers in their 2001 Communiqué *Investing in Competencies for All*. They set out a challenging agenda for schools in responding to rapidly changing needs and providing the foundations for lifelong learning. The Ministers drew a clear connection between the challenges facing schools and the need to attract, develop and retain high-quality teachers and school principals.
3. The project's purposes, analytical framework and methodology are detailed in OECD (2002a).¹ The main objectives are:
 - To synthesise research on issues related to policies concerned with attracting, recruiting, retaining and developing effective teachers;
 - To identify innovative and successful policy initiatives and practices;
 - To facilitate exchanges of lessons and experiences among countries; and
 - To identify options for policy-makers to consider.
4. The Activity is focussed on primary and secondary schools. It encompasses vocational programmes that serve secondary students, and special education programmes that enrol students of school age. While the major focus is on teachers, the scope includes other staff working in schools, and the ways in which their roles interact with those of teachers.
5. The project involves two complementary approaches: an *Analytical Review strand*; and a *Thematic Country Review strand*. The Analytical Review strand is using several means – country background reports, literature reviews, data analyses and commissioned papers – to analyse the factors that shape attracting, developing and retaining effective teachers, and possible policy responses. All of the 25 countries involved in the activity are taking part in this strand. In addition, 10 of the school systems have chosen to participate in a Thematic Country Review, which involves external review teams analysing teacher policies in those countries.
6. Korea was one of the countries which opted to participate in the Thematic Country Reviews and hosted a review visit in April 2003. The reviewers comprised an OECD Secretariat member, and

¹ Reports and updates are available from www.oecd.org/edu/teacherpolicy

educational researchers and policy-makers from Ireland, Japan and New Zealand. The team is listed in Appendix 1.

The Participation of Korea

7. Korea's participation in the OECD activity is being co-ordinated by Dr. Ee-gyeong Kim of the Korean Educational Development Institute (KEDI), on behalf of the Ministry of Education and Human Resources Development (MOEHRD), and under the guidance of a National Advisory Committee (the membership is provided in Appendix 2). Korea's Country Background Report (CBR) on "Attracting, Developing and Retaining Effective Teachers" was prepared by Dr. Ee-gyeong Kim and Dr. You-kyung Han of KEDI.²

8. The review team is very grateful to the authors of the CBR, and to all those who assisted them for providing an informative, analytical and policy-oriented document. The CBR covered themes such as the background and content of the education reform policy, the nature of the school system, characteristics of the teaching workforce, aspects of the recruitment and retention of teachers, modes of teacher certification and employment, patterns of initial teacher education and their continuing professional development and teachers' conditions of work. Some of the main issues identified by the Korean CBR, and which are taken up in this Country Note, include:

- a shortage of teachers in primary education;
- an over supply of teachers for secondary teaching;
- the quality of initial teacher education;
- problems affecting the continuing professional development of teachers;
- difficulties in adjustment to and implementation of the recent educational reform measures;
- relations between the Ministry and the teacher unions;
- the issue of local autonomy for schooling policy; and
- protecting the status of the teaching career in a fast-changing society.

9. The Korean CBR forms a valuable input to the overall OECD activity and the review team found it to be very useful in relation to its work. The analysis and points raised in the CBR are cited frequently in this Country Note.³ In this sense, the documents complement each other and, for a more comprehensive view of the teaching career in Korea, are best read in conjunction.

10. The review visit took place from April 20 to April 29, 2003. The detailed itinerary is provided in Appendix 3. The review team held discussions with a wide range of educational authorities and visited many schools, teacher education institutions and other centres. Discussions were held with the Ministry, regional offices of education, representatives of teacher organisations, teachers, school leaders and students in schools, teacher education personnel, student teachers, educational researchers, representatives of

² The Country Background Report is referred to throughout the report by the acronym CBR and corresponds to Kim and Han (2003) in the list of references.

³ Unless indicated otherwise, the data in this Country Note are taken from the Korean Country Background Report.

parental organisations, and educational media representatives. This allowed the team to obtain a wide cross-section of perspectives from key stakeholders in the system on the strengths, weaknesses, and policy priorities regarding the teaching career in contemporary Korean society.

11. This Country Note draws together the review team’s observations and background materials. The visit was not a review of Korean education as a whole, but rather an analysis of the issues concerned with attracting, developing and retaining effective teachers in primary and secondary schools.⁴ The present report on Korea will be an input into the final OECD report from the overall activity. We trust that the Country Note will also contribute to discussions within Korea, and inform the international education community about Korean developments that may hold lessons on their own systems.

12. The review team wishes to record its grateful appreciation to the many people who gave time from their busy schedules to assist us in our work. A special word of thanks is due to the Korean National Co-ordinator, Dr. Ee-Gyeong Kim, for whom nothing was too difficult in ensuring that the review team was facilitated in every way possible. Her expertise, energy and enthusiasm were reflective of her work ethic, and of her concern for the future well-being of Korean education. It was a great pleasure for the review team to encounter first-hand the courtesy and hospitality for which Korean society is justly famous.

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

Structure of the Country Note

14. The remainder of the report is organised in the following way. Section 2 sets out “the national context,” which involves an overview of political and economic context as well as an interpretation of the educational policy context. Sections 3 to 9 focus on a range of central issues affecting the teaching career:

- Organisation and governance of the school system
- Initial teacher education
- Continuing professional development of teachers
- Labour market for teachers
- Teachers at the workplace
- Teacher’s career structure and incentives
- School management, evaluation and accountability.

The approach taken to each of these sub-themes is to identify the key features of the issue and to set out strengths and challenges pertaining to each, as interpreted by the review team.

15. Section 10 uses the analyses of these themes to set out some suggestions for future policy. The review team formed the view that attracting and retaining teachers were not major problems experienced in Korea. Its suggestions for reform, accordingly, focus more on the developmental aspect of ensuring an

⁴ The current review did not address the staffing of special schools. The staffing of pre-primary education was considered as part of another OECD review.

effective teaching force. Korea has launched an ambitious programme of educational reform, the achievement of which will rely heavily on the quality and effectiveness of its teachers. The review team was impressed by the striking educational achievements of Korea over recent decades. The challenges presented by reform policies for the future are significant. The reviewers have sought to diagnose what needs to be done to meet the challenges and to offer policy suggestions which will be of assistance to the Korean authorities as they position their education system to achieve national strategic goals. Section 11 of the country note contains some concluding remarks.

2: THE NATIONAL CONTEXT

The Political and Economic Context

16. Korea is an old nation with cultural traditions deeply rooted in its five thousand year old history. It has also had long experience of formal education. Korea has been open to external political, religious, cultural and economic influences, and it has experienced periods of occupation by external powers. Yet, it remains a remarkably homogeneous society in terms of ethnic and linguistic make-up, with only a very small proportion of non-Koreans in its population. Confucianism was a particularly influential current of thought which favoured the acceptance of hierarchical social structures, and which fostered order, obedience, loyalty, respect for elders and the family as civic virtues. Its older education traditions reflected an elite academic model of education, with considerable respect accorded to teachers and men of learning. It was a predominantly agricultural country, which also tended to emphasise continuity and stability in social mores.

17. Over the last half century Korea has experienced a remarkable period of accelerated change which, on accumulation, has greatly altered the configuration of Korean society. Following the Second World War, a great deal of political upheaval occurred in the Korean peninsula. This evolved into a major three-year war in 1950 which ended in an armistice in July 1953. This resulted in the division of the Korean peninsula into two states, The Democratic People's Republic of Korea and the Republic of Korea, separated by a demilitarised zone at the 38th parallel.

18. The Republic of Korea, while having experienced great human and material losses during the war, has transformed itself in political, economic and social terms over recent decades. The country was ruled by a series of military regimes until the first civilian government was elected in 1994. Korea is a constitutional republic, with the president as the key authority figure. The government consists of three branches, a unicameral legislature, the executive, and the judiciary. The country is divided into sixteen administrative units: the metropolis of Seoul, six other metropolitan cities, and nine provinces. Local authorities became fully democratically elected from 1995. The central government makes nearly all decisions on taxation. 80% of all taxes are raised at the national level. Local taxes are also set by central government and are uniform throughout the country.

19. According to the census of 2000, Korea has a population of 47.6 million, with a population density of 476 people per square kilometre, the third highest in the world. A very large proportion of the landscape is mountainous and inhospitable for habitation, leading to a heavy population press on cities. The population is expected to decrease in the years ahead due to a decrease in the fertility rate, a raise in the age of first marriage, a shift in the age balance of the workforce and an imbalance in the sex ratio at birth, in favour of males. The demand for labour has been high in a rapidly changing economy, with the

official unemployment rate in 2002 as low as 2.6%. However, there is a heavy reliance on temporary, rather than on long-term or permanent employment. Unemployment tends to be higher in the young age group of 15-24. The employment rate for university graduates on graduation is relatively low, at about 61% in 2002. Up to recent years there was an absence of unemployment benefits, and even yet the benefits are restricted, and not available for long-term unemployment. Only about 11% of unemployed people receive financial benefits. The rates of salary vary greatly between industries and locations. Restrictions on free collective bargaining and on strikes have been a feature of Korean society. These have become more relaxed in recent years, but they do not as yet operate in Korea in as smooth or accepted a way as in developed democracies. Traditionally, women did not form a significant proportion of the workforce, but this is now changing, in the context of new life styles. However, salaries of women are still significantly lower than those for men workers. Pension schemes are at an early stage of development and are still limited in nature.

20. There has been a remarkable change in the occupational patterns of the workforce. Up to the early 1970s more than 50% of the labour force was still engaged in agriculture, often on very small farm holdings. The percentage is now reduced to about 11%. During the last forty years, the government has promoted a high drive towards manufacturing. It targeted heavy and chemical industries such as iron and steel, non-ferrous metals, ship-building machinery and chemicals. The infrastructure for light industry was also upgraded. The government and private industry were also very alert to the potential of applied electronics and of information and communication technologies. The service sector has been promoted and now occupies about 61% of the labour force. Rapid industrialisation, and the growth of the manufacturing and service employments in recent decades have greatly altered the work profile of the Korean population. The GDP growth per annum greatly exceeded the OECD average. The economic difficulties experienced by Korea, as well as other Asian economies in 1997 and 1998, slowed the momentum of growth, but recovery measures have been successfully put in place. Speedy urbanisation accompanied the employment changes. The accelerated pace of social, economic and employment change has been accommodated by a traditional society in a short time span, of about a generation. This does not happen without strains, stresses and challenges to habitual life style practice. In this regard, Korea can be viewed as a society in transition. This transition dimension is very directly reflected in the Korean education system, and is discussed below.

Korea has regarded education as central to its modernisation drive. The expansion in student participation can be noted in Table 1.

Table 1 – Expansion of Students in Secondary and Higher Education

Year	Middle School	High School	Higher Education
1970	1,318,808	590,382	201,436
2002	1,841,030	1,795,509	3,577,447

Source: MOEHRD, 2003, p.15.

21. As was remarked by an OECD study in 1998, “participation and completion rates at all levels of formal education are among the top handful of nations” (OECD, 1998, p.100). This has been a remarkable achievement by Korea, which started from a very small base of schooling provision in the early fifties. The percentage of 25-34 year olds with high school education is 95% well above the OECD average (OECD, 2003). The MOEHRD budget has been sustained at about 20% of the entire government budget for many years, and reflects the priority being given to education. Since 1995 the government has sought to apply 5 percent of GNP to education. This public expenditure is heavily supplemented by a strong tradition of private expenditure by families on education, including paying for private tutoring expenses. As well as the quantitative expansion, the Korean education system has been subject to periodic reviews and planning for qualitative reforms. This is particularly so since the advent of a democratic government in 1994. The status

of the education minister's portfolio has been raised to that of Minister of Education and Human Resource Development, and in 2001, the Minister was appointed as Deputy Prime Minister.

The Educational Policy Context

22. The MOEHRD⁵ leads the process of development and implementation of educational and teacher policy. This includes the process of consultation of the different stakeholders and the consensus building before the adoption of policies.

23. The *Education Reform for a New Education System* (1996) was led by the Presidential Commission for Education Reform (PCER), an advisory organ to the President involving education experts. More recently, the *Comprehensive Plan to Develop the Teaching Profession* (2001) is the result of an extensive 3-year consultation process which involved education experts, school administrators, teachers, teacher educators, and parents in formal and informal conferences in major cities nationwide. This effort was complemented by an Internet Home Page and the publication of 85,000 booklets (see Section 2.5 of CBR).

24. A major development has been the legalisation of teacher unions in 1999, which had a profound impact on the structure of teacher collective bargaining. Currently teachers are represented by two types of organisations:

- i) the long-established Korean Federation of Teachers' Association (KFTA), a professional organisation founded in 1947 and whose membership covers about half of the teaching workforce; and
- ii) the new legalised unions, the Korea Teachers and Workers Union (KTWU) – with a degree of unionisation of about 20%, but on the rise, and particularly popular among the new generation of teachers – and the smaller Korea Union of Teaching and Educational Workers (KUTE).

25. These two types of organisations differ in their legal ground, basic rights, and areas of bargaining (see Table 2.11 of CBR for an account of the differences). The government tends to negotiate with the KFTA on matters of teacher policy in general and teacher professionalism in particular while the negotiations with the unions focus on salaries and working conditions, but a clear-cut definition of bargaining areas has not been achieved. As a consequence, the dual policy suffers from redundancy of negotiations and ineffectiveness of agreements. In addition, the interaction between the government and teacher unions is still at an early stage of development and both parties still seem to be learning how to deal with the new institutional reality.

26. Educational policy in Korea is undergoing a period of major transition which is of great significance. This forms part of a broader and profound period of political, social and economic change in Korean society. Within a relatively young, but dynamic democracy, newly organised voices are emerging with major claims in the educational debate. These include a more radical voice of organised teacher unions, a more organised voice of parents, the views of a younger generation less constrained by memories of past privations, and a general public which has benefited from the expansion of educational provision in recent decades. Yet, many social attitudes, values, modes of behaviour and expectations are rooted in the deep cultural heritage of Korea, including its Confucian shaping influences.

⁵ An organisational chart of MOEHRD is provided in Figure 2.2 of the CBR and Section 2.5 provides a detailed account of distribution of responsibilities among MOEHRDs divisions.

27. In the mid nineties, the Korean government set about strategic planning as to how best position Korea to achieve its potential within the emerging knowledge society in the context of globalisation, the impact of the ICT revolution, and the acceleration of the knowledge base in so many disciplines. It identified education reform as a central plank in the preparation of Korean society for the challenges ahead. As the Report of the Presidential Commission on Education Reform (1996) stated, “A nation’s level of creativity in the fields of science and technology, and knowledge and culture is the most potent determinant of the fate of the nation.... A reservoir of the nation’s assets relies on the learning capability and creativity of its people. Education plays the most vital role in developing a nation’s intellectual power” (PCER, 1996, p.3). The Report set out a radical new direction for Korean education. While recognising the educational achievements of the past, it stated that the inherited system, “will no longer be appropriate in the era of information technology and globalisation” (Ibid., p.11). It also broadened its vision from the traditional educational institutions to encompass the concept of lifelong learning. In succeeding years, this approach has been sustained, and has led to a range of policy documents, including the Seventh Curriculum which set out a series of new qualities and skills to be cultivated by the education system, as well as the contents and pedagogic approaches aimed at achieving them. In so doing, it consciously set out to challenge and oust many of the objectives, attitudes and approaches which had hitherto prevailed, and which would inhibit the new educational philosophy. It is highly significant also that the government identified the teaching career as being crucial to this task and sought to bring about many reforms as reflected in “The Comprehensive Measures for Developing the Teaching Profession” (2001).

28. One of the most striking features of Korean society is the extremely high profile of education as an issue of public interest. Koreans view achievement in education as the key social escalator for success in life. It can be said that parents are frequently even obsessed in their efforts to secure the educational success of their children. They will go to great pains and massive expense to secure this. Success in the College Entrance Examination has been, and continues to be, the key to gaining access to higher education, and the better the performance, the more prestigious the university place available. The outcome of these trends has been that the education system is examination driven and competition driven, giving rise to many deleterious consequences for the promotion of balanced, harmonious, holistic education. The emphasis on rote learning, examination techniques, grind schools, individualism and unnatural duration of study hours is in strong contrast to what government policy advocates. As it seeks to promote creativity, imagination, self-reliance, divergent thinking, cultural enrichment, self-reflection, entrepreneurial flair – it is up against a contrary strong, traditional, habitual approach, which has a great deal of parental support, and with which the older teachers are well familiar.

29. The College Entrance Examination has experienced some reforms, but a great deal still depends on the performance of pupils on the Scholastic Aptitude Test. This takes place on just one day per annum, throughout the country, and is very predominantly a multiple choice written examination, even for languages. The character of such a high stakes examination has major “backwash” effects on what happens in schools. As in all educational systems, the mode of assessment has a huge shaping influence on the nature of the teaching.

30. Thus, in this era of transition a major dilemma or tension emerges for teachers. By law, they are required to implement national education policy, but parental pressure is exerted to teach for the examination, upon which teachers’ credibility among parents may depend. It can be a difficult position for teachers, and this is dealt with later in the report.

31. The achievement of major educational reforms is a very complex and difficult process in all countries. It would seem that this has been under-estimated in Korea. It is noticeable that there is a great dearth of research studies on strategies for the successful implementation of education reform measures. While admirable research institutes now exist, this seems to be a significant gap in their research agendas. It will require sophisticated leadership informed by good research, as well as sustained political will and

needed resources if the emphasis is to be genuinely shifted from the exam driven, teacher centred, institutional focussed approach to the client centred, pupil focussed, learning-oriented approach sought by official policy.

3: ORGANISATION AND GOVERNANCE OF THE SCHOOL SYSTEM

Features

32. Korea's education system is based on a 6-3-3-4 ladder structure consisting of six years of elementary school, three years of middle school, three years of high school, and typically four years of college or university. The period of compulsory education is nine years corresponding to elementary and middle school. Kindergarten is not part of the formal system (see Figure 2.1 of CBR and Section 4 of MOEHRD, 2003).

33. Middle school graduates can choose between academic general high schools and vocational/technical ones. Academic high schools are mainly for students who wish to pursue studies at tertiary level while vocational schools provide professional education in 5 main fields: agriculture, manufacturing, commerce, fishery and oceanography, and home economics and business. In 2002, 67% of students in high school attended the academic track (Table 2.3 of CBR), a rise from the 62% observed in 1995 (OECD, 1998, p.15).

34. Higher education institutions in Korea fall into five categories: four-year colleges and universities offering bachelor's degrees; universities of education; 2 or 3-year junior colleges; polytechnics; and miscellaneous schools (see description in OECD, 1998, p.16).

35. Schools are of three different types depending on the organising body. National schools are managed by the national government, while public and private schools are run by local governments and private foundations respectively.

36. In pre-tertiary education, the presence of the private sector is particularly relevant in upper-secondary education – 46.1% of high schools were run by private institutions in the year 2002 – but less so in other levels of education (24.2% and 1.4% in lower-secondary and elementary education respectively). By contrast, for the same levels of education, the presence of national schools is negligible (0.3%, 0.3%, and 0.8% for elementary, lower-secondary and upper-secondary education respectively). In tertiary education, the private sector is dominant – 90% of junior colleges and 76.8% of universities are run by private institutions – and in pre-elementary education its presence is strong, operating 49% of the institutions.

37. Tuition is provided free in public compulsory education. Similarly, for grades corresponding to compulsory education, private secondary schools which are subject to the "school equalisation policy" cannot charge tuition and are subsidised on a basis similar to public schools. It follows that they are subject to the same regulations affecting public schools in domains such as curriculum, teacher qualifications, facilities, or selection of students. The few private schools at the primary level and private secondary schools not subject to the "school equalisation policy" can charge tuition but ceilings are imposed by the government. Beyond compulsory education, both public and private schools charge tuition, of similar value for private secondary schools regulated by the equalisation policy. Regarding the recruitment of

teachers, private schools benefit from more discretion than public schools – e.g. they can hire a greater proportion of "contract teachers",⁶ often a solution for private schools to overcome the greater difficulties they face in hiring teachers.

38. In primary education, students are assigned to a public school located in their residential area but parents also have the possibility of enrolling their children in a private school with no geographical restrictions. As regards middle schools, students are generally assigned randomly to a public or private school in their neighbourhood. This system extends to general education high schools except in rural and remote areas where schools decide which applicants are to be admitted. The admission in vocational and special purpose high schools involves considerably more discretion. Students apply directly to the schools they wish to attend. Subsequently, high schools decide which applicants are to be admitted, according to pre-established criteria.

39. Three levels of administration exist above school management: the Ministry of Education and Human Resources Development (MOEHRD) at the central level, 16 metropolitan and provincial offices of education at an intermediate level, and 180 district offices of education at a local level.

40. A recent trend has been the gradual transfer of administrative power from the national government to local governments and individual schools. The government introduced autonomy at municipal and provincial levels in 1991 and transferred a portion of its responsibilities to local offices, including budget planning.

41. Formally, the MOEHRD is responsible for: developing and implementing national policies for schools, tertiary and lifelong education, including teacher policy; developing the national curriculum and approving the textbooks; providing administrative and financial support to schools; and supervising educational institutions. The 16 metropolitan and provincial offices of education administer education at a local level. They are responsible for educational infrastructure, the management of curriculum and for ensuring the application of national educational policy and school regulations. They are also directly responsible for high schools in their area. The 180 district offices of education are subordinate organs of the metropolitan and provincial offices of education and focus on the supervision of public and private kindergartens, primary and middle schools.

42. In public education, despite the attempts to provide more autonomy to individual schools and introduce accountability principles, the scope of school decision-making remains very limited. Ultimately, levels of administration above the management of schools control the main elements affecting schools' functioning such as personnel management, budget allocation or curriculum administration. A body that was recently introduced in Korean schools is that of the School Council whose membership includes teachers, parents, and community members. The School Council has an advisory role, but is often controlled by the authority of the principal. As regards resources, local authorities rely heavily on the central government, which still supplies over 80% of the local budget for education.

Strengths and Challenges

43. As has been noted in Section 2, the remarkable zeal for education among Koreans is most striking. There is a very wide societal agreement on the importance of education for both the country's

⁶ A "contract teacher" is a teacher with a regular certificate but not necessarily having passed the "employment examination", hired directly by the school principal to fill in a temporary vacancy. Contract teachers are viewed less positively than regular teachers by parents and students due to their temporary status.

well-being and for personal development. Individuals see education as the main vehicle for socio-economic mobility and the acquisition of status in society.

44. This enthusiasm has both positive and negative aspects. As well as the impressive educational participation rates, Korean school students perform at a very high level according to international assessments of student performance such as PISA.⁷ Not only does the average Korean student perform highly - among OECD countries, Korean students rank 6th, 2nd, and 1st in reading, mathematical and scientific literacy respectively – but, overall, variation in student performance is among the lowest in the OECD area (OECD, 2001a).

45. However, the enthusiasm of Koreans for education entails problematic aspects. Given the current importance of credentials in Korean society, the purpose of undertaking further education is often limited to the acquisition of societal status. Also, families' substantial investment in children's education and the corresponding expectations create enormous pressure on Korea's youth. The aggravating competition that results potentially leads to harmful effects on the individual development of children – by decreasing self-esteem, increasing levels of frustration, or limiting social skills. A particularly illustrative example is the astonishing strength of the private tutoring system attended by most students after school hours, a presence that is damaging at various levels – hinders children's sound development, overburdens family budgets, and perpetuates the exam-driven mentality installed.⁸ In addition, this also translates into vocational education being viewed by society as a lesser branch/constituent of the education system, an aspect likely to harm the distribution of skills in the population already reflected on high unemployment rates among the academically-educated.⁹

46. Another particularly negative feature of the Korean education system is the dominant role of the College Entrance Examination. It is one of the most important annual events for the whole society and the belief that it determines to a large extent individual success is deep-rooted among Koreans. This has considerable perverse effects. First, it distorts the fundamental goals of education by entailing an excessive focus on knowledge acquisition and providing incentives to teach "to-the-test". Second, it leads to overheated competition among students and possibly to reduced student engagement once the barrier of the examination is overcome. In addition, it sustains the existence of a strong private tutoring system which overburdens students. Furthermore, it places teachers at the centre of a conflict between the demands of the Seventh Curriculum and parents' pressure for children to be prepared for the College Entrance Examination.

47. On the positive side, the consecutive governments that followed the military regimes have shown a strong commitment to reform in education and, despite the different political orientations of the different governments, the main objectives and directions have been kept. The scope of reforms has been substantial and it is particularly noteworthy that one of the main aspirations is the embedding in society of a new vision of the purposes and scope of education, moving away from the current exam-driven-for-credentials type of culture.

⁷ PISA, Programme for International Student Assessment, is a three-yearly survey of the knowledge and skills of 15-year olds measuring performance in three literacy domains: reading, mathematics and science.

⁸ Korea is the country within the OECD area with the highest percentage of 15-year-olds who report having sometimes or regularly attended remedial courses outside of school in the language of assessment, in other subjects, received training to improve study skills or private tutoring in the last three years, with 58% nearly twice as much as the OECD average (OECD, 2002b, Table D1.3).

⁹ Employment rates of graduates from vocational high schools have continuously increased relative to those of university graduates (Section 1.4.3 of CBR).

48. In the development of reforms in recent years, efforts have been undertaken to take account of the views of a range of stakeholders through established consultation mechanisms. In addition, the government informs policy-making by commissioning educational research from academics and research institutes – e.g. Korean Educational Development Institute (KEDI) or Korea Institute of Curriculum and Evaluation (KICE) (see Section 5, MOEHRD, 2003).

49. Nonetheless, the general feeling is that education reforms have not been implemented to the extent desired and the new educational culture inspiring the reforms is still not ingrained in Korean society. The system remains based on knowledge acquisition, dominated by the college entrance examination, school autonomy is still very limited, and evaluation and accountability principles are incipient. A clear exception is the impressive provision of ICT in schools and educational agencies which accomplishes the objective of granting Korean children access to information and multi-media technology needed to function in today's knowledge-based society.¹⁰

50. Another impressive achievement has been the marked expansion of the Korean education system in recent decades. Enrolment rates increased from 28% in 1970 to 90% in 1995 in high school and from 51% to 100% in middle school for the same years (OECD, 1998, p.27). Similarly, the percentage of high school graduates entering tertiary education grew from 40% in 1970 to 87% in 2002 (Section 2E, MOEHRD, 2003). As a result, the number of educational institutions boomed in the last few decades: between 1960 and 2002, the number of middle schools almost tripled, that of high schools more than tripled and that of higher education institutions was multiplied by 15 (Section 2C, MOEHRD, 2003).

51. However, expenditure on educational institutions per student in primary and secondary levels is below the OECD average (Appendix 4). This is so despite the high proportion of public money being spent on education. This situation is explained by an average class size well above the OECD mean – Korea remains the OECD country with the biggest class size both in primary and lower secondary education with more than 35 students per class (Appendix 4).

52. In addition, the proportion of private investment in education relative to public investment is high in Korea in comparison to other OECD countries. In 1999, for non-tertiary education, the proportion of private expenditure on educational institutions reaches 20%, the second highest among OECD countries. In light of this reality, recent efforts have been made in order to increase public investment in education. In particular, the Education Reform for a New Education System has established the objective of reaching a public investment corresponding to 5% of GNP. The rapid expansion of the education system in Korea initiated in the 60s has led the government to encourage the participation of the private sector. This is now reflected in a substantial proportion of private institutions in upper-secondary education and tertiary education.

53. The efforts undertaken recently to broaden the set of stakeholders which participate in consultation mechanisms are an additional positive step. Of particular relevance is the legalisation of teacher unions in 1999 and their subsequent involvement in the negotiation process. In addition, a consultative culture is being developed in schools with the introduction of School Councils and the feedback to educational authorities through informal means such as bulletin boards on the Internet has been encouraged. A further positive element is the openness of the Korean educational system to external views – e.g. international reviews of education, international assessment of educational performance.

54. Still, the tradition of collective bargaining remains underdeveloped and the communication between the government and teachers' representatives is often inadequate. Moreover, educational strategies

¹⁰ Korea is among the countries with the lowest ratio of 15-year-old students to computers in schools even if some variation seems to exist between schools (OECD, 2002b, Indicator D3).

do not always seem to reflect the views of local actors or respond to local circumstances – e.g. the School Council has a very limited say in school's affairs.

4: INITIAL TEACHER EDUCATION

Features

55. Initial teacher education is a long established feature of the Korean education system, but it now faces significant new challenges. The vast majority of elementary school teachers are trained in 11 national universities of education. These were originally two-year colleges but, in the early eighties, they were upgraded to four years universities. They are single-purpose institutions devoted specifically to the education of elementary school teachers. Since 1996 these national universities have also had the right to offer master degree courses in education. There are two other institutions which graduate small numbers of elementary school teachers. These are the Korea National University of Education with about 160 such students and the Ewha Women's University, with about 50 students. In all, about 5,000 students graduate each year for elementary schools. Because of the shortage of primary school teachers, partly due to the outflow of teachers due to the reduction of the retirement age to 62 in 1999, the job opportunities for graduates of these institutions are very good.

56. The equipment and facilities of the national universities of education are regarded as generally inadequate for the type of teacher education now required. The institutions also suffer from very high student-staff ratios, with about 40 students per staff member. Such large numbers make it very difficult to give the small group work and individual attention which are needed to help trainee teachers develop the skills and competencies required by the teaching styles set out in the Seventh Curriculum. This high ratio is also a factor in sustaining a style of teaching which is very lecturer-led. The student timetable tends to be very crowded, with up to 28 hours per week of teacher contact. The course tends to be very crowded and also fragmented. There is insufficient space for, or attention to the need for student reflection and research. In May 2002 the government took the initiative, "Measures to Improve Universities of Education". This involves a plan to invest 30 billion won (about US\$ 2.5 million) for the period 2003-07, to improve the facilities for teacher education programmes in the universities of education.

57. The situation regarding the education of secondary teachers and their employment prospects is very different from that of elementary teachers. Secondary teachers are trained in four types of institution. These are Teacher Colleges (40 institutions, both national and private); Teacher Education Courses in Comprehensive Universities; Departments of Education in Comprehensive Universities; and Graduate Schools of Education. In 2001, of the 31,000 students who graduated with Certificates, 12,228 were in Teacher Colleges and 12,450 in Courses in the Comprehensive Universities. Graduates from all four types of institution are equally eligible for applying for the teacher employment examination. There is a very large over-supply of secondary teacher graduates. The government has been anxious to reduce these numbers, but without success. Thus, there is a serious mis-match in the demand-supply aspect of secondary teachers. Consequently, the employment rate for such graduates is only on a ratio of 1:5, or 20% of graduates.

58. This is affecting the status and public image of secondary teacher education. A number of entrants are of poor academic standard. Furthermore, as the review team confirmed in discussions with students, many of the entrants do not intend entering the teaching career, but use their experience for other

careers such as translation, ICT, art and design. There is also widespread debate about the relative roles of the different types of institution training secondary teachers. For example, the review team became aware that Teacher Colleges, originally created with the exclusive mission of educating teachers, are under criticism for no longer making a distinctive contribution given the similarity of their approach to that of other types of institutions. Also, the education courses within the comprehensive universities are generally not highly regarded. Overall, there tends to be a lack of coherence, cohesion and identity in the courses provided. They tend to be institution and teacher-centred, rather than student-centred. Large classes, overcrowded timetables and, in some cases, lack of awareness of, or interest in the Seventh Curriculum indicate a serious distancing of these courses from what is needed to equip teachers for schools in the future. There is also a lack of flexibility, with students tending to concentrate on one major, which limits their employability in the senior classes where student subject choice increasingly exists. There are also concerns about the quality of the education provided by Graduate Schools of Education and a lack of clarity about the areas (e.g. initial teacher education or in-service training) in which their role is likely to be more effective.

59. The tuition cost for teacher education is about 2 million won (approximately US\$ 1,700) per year at the national universities of education, and 2.3 million won (approximately US\$ 1,900) for national teachers' colleges. Tuition at private universities is about twice that of national institutions. In general, parents pay the tuition, but some scholarship schemes exist.

60. To acquire the teachers' certificate from the teacher education institution, the student teacher has to earn the required credit points in teacher education and major courses taken. They receive the Grade 2 teacher certificate upon passing the graduation examination. The same teacher certificate is required by teachers in national, public and private schools alike.

61. However, the possession of the teachers' certificate does not entitle one to employment as a teacher. A distinct second phase is involved, known as the Teacher Employment Examination. This test is independent from teacher education institutions and is conducted on a nationwide scale on the same dates by the local education authorities which are the metropolitan and provincial offices of education. The Ministry decides the format and the Korean Institute of Curriculum and Evaluation (KICE) designs the examination questions.

62. Among key concerns of the government regarding initial teacher education at present are the rigidities of programmes, the diversification and uneven quality of the courses for secondary teachers, as well as the over supply of candidates for such courses. The government is exploring the idea of merging primary and secondary teacher education and making it available through graduate institutions, but this proposal faces considerable opposition.

Strengths and Challenges

63. Korea is fortunate that the teaching career still attracts large numbers of candidates, many of high quality. While the traditional high regard for the role of the teacher may be under threat, due to changed socio-economic and cultural circumstances, it still has some potency. Many candidate student teachers view the teacher's role as being very meaningful and satisfying. Students wish to do "well", and are motivated towards being supportive of pupils' development, and of being well regarded by them. Student teachers are also influenced by the strong public profile of education within Korean society.

64. There is a long tradition of teacher education in Korea, and it has an established infrastructure of teacher education institutions. While there has been an over-diversification of teacher education courses, with an over supply of candidates for secondary teaching in recent years, a valuable infrastructure exists, with many institutions keen to be recognised as making significant contributions. The review team also

found evidence in institutions of moves to adapt and change courses and procedures in line with new requirements.

65. In recent times, more flexibility is being achieved within the system whereby, for instance, holders of qualifications for secondary school teaching are enabled to gain access to elementary schools, where there is a shortage, by taking additional courses. The system also allows for non education graduates, who have an appropriate academic background, to access the teaching career, with conversion courses. Such personnel can bring new experience and perspectives to enrich the teaching force and widen its repertoire of expertise.

66. However, it is clear that the concepts of teaching and learning as set out in the PCER Report (PCER, 1996) and the Seventh Curriculum involve a fundamental and unprecedented challenge to the traditional modes of teacher education. The PCER Report was condemnatory of the existing form when it stated "The present teacher education system is to be blamed for the lack of professionalism of teachers" (PCER, 1996, p.69). It went on to state, "The curriculum will be reformed to make it more relevant to the practices of teaching and learning at school and for teachers to be equipped with more practical knowledge of daily school life" (Ibid., p.70). *The Comprehensive Plan to Develop the Teaching Profession* (MOE, 2001) involved wide-ranging plans for the development of the teaching profession, including teacher education. Reform of teacher education in any country is not a short-term process. At present, teacher education in Korea is in a process of transition, with old moulds under strain or breaking, while the new formats and approaches are not yet firmly formed.

67. Among weaknesses which require remedial attention if the significant challenges are to be met are the following. The teacher education system is not sufficiently focussed on the needs of student teachers in relation to the demands which will be on them from the new educational policies to be implemented in the schools. The system has traditionally been organised more on the desires of faculty members and institutional concerns. The centre of attention needs to shift. The curriculum of teacher education has been designed on a model which is too content laden, and is overcrowded and fragmentary. The teaching-learning approach relies too heavily on lecture input, with inadequate student input. The student-staff ratios at 35/40 to 1 lecturer are very high by international standards and serve to inhibit small groups and individual tuition. Inadequate time is allocated for student reflection research and personal study.

68. The review team was also concerned that the methodology of teaching individual subjects was often in the hands of university personnel who were much more associated with the subject as an academic discipline than with its pedagogical possibilities for children of school-going age. The team formed the impression that too much distance existed between the school room and the lecture hall. The team encountered among some staff inadequate awareness of, and empathy with the philosophy and objectives of the Seventh Curriculum, and these did not seem to influence their course content. Unless good alignment exists between national policy for schools and the preparation of teachers for work in the schools, serious problems arise.

69. A serious defect which has been a feature of the traditional courses is the very limited attention paid to the practical training within classroom conditions. In some courses it has only been a tokenism, involving four weeks in the last year of a four-year programme. Students whom the team met at the end of their three years in teacher education had never experienced teaching practice. In one institution visited, the staff reported that while more teaching practice might be desirable, the pressure on subject content was so great that staff were reluctant "to give up time for teaching practice". Such a statement raises a very fundamental issue of the *raison d'être* of the teacher education course. It reflected a very blinkered view of the needs of the student and of the school system. While some institutions have brought in improvements in recent times, the provision for teaching practice is still insufficient. Links with practicing schools also

tend to be too tentative. There seems to be little, if any, structured format for the teaching profession to make inputs into the planning of teacher education programmes.

70. Teacher certification from the teacher education institutions is weak, lacks intellectual rigour and also lacks public confidence. The existence of the Teacher Employment Examination, as the key mechanism for entry to the teaching profession, may be a deterrent to developing a teacher training process and certification, on the pattern of most developed countries. It is usual internationally for the teacher education institution to take on the responsibility of accrediting graduates as fit persons to undertake the teaching career, and to stand over its judgement. Linked to this issue, is insufficient accreditation of teacher education institutions, with a consequent lack of quality control of courses offered. Insufficient quality control is particularly apparent with regard to the very large number of institutions offering secondary teaching education courses, frequently to students who do not intend entering the teaching career.

5: CONTINUING PROFESSIONAL DEVELOPMENT OF TEACHERS

Features

71. While the reform of initial teacher education is of crucial importance for the future well-being of the school system, the reality is that new graduates will only form a small proportion of the general teaching force for many years. In the context of the paradigmatic shift in government education policy in recent years, building the capacity and motivation of the existing teaching force to implement such changed policy is a major task. The majority of in-service teachers have been trained for a different system, through a training system which has had many deficiencies, when viewed from current system needs. As is to be expected, teachers have become habituated to school administrative structures, curricula, teaching methods, modes of pupil evaluation and general modes of school procedure and relationships which are now called into question.

72. As well as promoting many reform elements in school policy, the PCER Report (PCER, 1996) also states: "The institutionalisation of lifelong learning will be the inevitable outcome of increasing the self awareness of humans and the advent of new technological inventions" (PCER Report, p.5). The lifelong learning of teachers becomes a particularly acute issue for the scenario being sketched by the PCER Report. Teachers need to be pro-active in their own learning and re-learning if they are to be successful in promoting a learning to learn capacity in their own pupils. The Korean government's "Comprehensive Measures to Develop the Teaching Profession" (MOEHRD, 2001) reflects an awareness of the significance of good quality in-service education for teachers. However, as yet, old practices continue in operation and they attract considerable criticism from teachers and other involved personnel.

73. It is noteworthy that a form of teacher induction is available for newly employed teachers. A specific pre-employment course is provided by the provincial or metropolitan educational authorities. School superintendents organise a two-week course aimed at helping the new teachers to adapt themselves to the school setting. Following employment, school administrators are encouraged to sustain support and supervision for the new teacher, over a six month period. This involves giving advice and guidance on role, and being available to assist in the sorting out of initial difficulties encountered.

74. In-service education for established teachers takes a dual format. One relates to qualification training for acquiring special certificates in relation to promotion. This training includes that for Grade 2

teachers, Grade 1 teachers, counsellors, Grade 1 nursing teachers, vice principals and principals. These training courses usually involve 180 hours attendance. The other form of in-service education is focussed on general training for broadening overall knowledge in educational theory and practice and enhancing teachers' professionalism. The forms of training for this mode of general professional training include areas such as information technology, curriculum content up-dating, liberal arts and general educational studies. Participation in this training is voluntary and teachers pay some of the costs. The Ministry sometimes provides teachers with training opportunities particularly in relation to curricular up-dating or specific new policy measures.

75. There is a vast range of institutions involved in the provision of in-service teacher education, amounting to over 1,320. These include central-level training institutes, institutes affiliated with comprehensive universities and universities of education, training institutes run by local governing bodies, and private training institutes designated by local governing bodies.

76. The profile of teacher professional development in upper secondary education which emerges from Appendix 4 of this report presents a mixed image of teacher engagement. On some key criteria Korea scores below the OECD average. Thus, in relation to schools having a separate budget for professional development, providing time for professional development and organising staff development activities, the Korean schools fall short of the OECD average, and trail at the bottom of the 14 countries surveyed. Korean teachers also score poorly on "visited companies/employers". Principals of schools attended by 15-year olds also reported that the proportion of teachers who had attended a programme of professional development in the previous 3 months was 26%, again below the OECD average of 42%. On the other hand, Korean teachers of upper secondary schools score well above the OECD average on ICT related courses, courses on subject matter and methodology, engagement in Master's and Ph.D. programmes, participation in mentoring or peer observation as part of a formal arrangement, and attendance at conferences on educational topics. It would seem that the pattern of participation in continuing professional development is based more on the initiative of individual teachers, than on the school as an institution.

Strengths and Challenges

77. There is official acceptance in Korea of the need for induction and the continuing professional development of teachers. There is also a realisation of the need for qualitative improvements in the forms of in-service education being provided. There is a wide range of providers of in-service education, at various levels within the system, and experience has been built up. There is a tradition of teacher engagement in in-service training, sometimes paying some of the costs, and devoting vacation time to it. There is also a system of gaining professional credits for achievement in in-service education. It is also a strength that some school-based teacher development takes place, even if it does not always have external support or assistance.

78. Not unexpectedly in current circumstances, traditional forms of continuing professional development of teachers have come under criticism from a variety of agencies. The agency most centrally involved is the teaching force. No (1998) criticises the effectiveness of the in-service training and reports that most teachers remain very passive and uninterested towards the courses. Kim (2000), in an opinion study of secondary teachers, reports their dissatisfaction with the content, evaluation, method and accessibility of the in-service training. The review team encountered similar expressions of dissatisfaction with the quality of continuing professional development courses. Thus, while there is both a tradition and an infrastructure for such training, it faces a number of challenges to bring it into line with the system's needs.

79. While teacher induction exists, it tends to be short, and lacks systematic planning and desirable forms of facilitation. A great deal depends on the character of the school and the attitudes, skills and levels of interest of senior staff.

80. It seems clear that some of the professional development provision lacks a clear direction, and is not sufficiently influenced by teachers' needs and interests. The methodology relies unduly on large lecture format, with inadequate active engagement by course participants. There is no minimum legal requirement for all teachers to engage in continuing professional development. Accordingly, it is possible that a teacher could operate for a full career on the basis of his/her original certification and teaching employment test. Teachers are expected to be evaluated each year by the principal or vice principal, but there does not seem to be any feedback links from such evaluations to inform continuing professional development planning.

81. The dual track of continuing professional development may be unhelpful. It tends to prioritise forms of in-service education, on a patterned track, leading to promotion to administrative positions. This has the effect of under-emphasising the performance-based teacher development, which relates to the needs of the great majority of teachers. The review team also formed the view that there is a lack of sufficient care in the selection of the most appropriate and best-skilled personnel to provide professional development courses of high quality and win the respect of teachers. With over 1,320 agencies providing in-service training it would be difficult to ensure a sufficient cohort of well qualified, experienced and skilled in-service facilitators. A further linked challenge is that the evaluation and quality control of professional development courses tend to be formulaic, rather than tightly focussed on quality and improvement.

6: LABOUR MARKET FOR TEACHERS

Features

82. The labour market for teachers in Korea operates within a wider labour market, as is the case in other countries. The availability and attractiveness of alternative employment options, of course, impact on supply rather than demand. The significance of this was apparent in Korea during the late 1990s when the general labour market contracted, greatly increasing the attractiveness of teaching as a career option. The teacher labour market divides into sub-markets relating to the level of education, i.e. elementary, middle and high schools; subject specialism, including those subjects offered by vocational schools; and region. There are also labour market distinctions between public and private schools.

83. In 2002 there were 357,084 teachers employed across general high schools (20.8%), vocational high schools (11.2%), middle schools (26.7%) and elementary schools (41.3%). The number of teachers employed in schools has increased between 1990 and 2002, particularly at the high school level. The increase in the number of general and vocational high school teachers between 1990 and 2002 was 23%. The number of middle and elementary teachers grew less significantly over this period, i.e. 6% and 8% respectively (CBR tables 2.4, 2.5, 2.6).

84. Women comprise a greater proportion of elementary school teachers (71.6%) and middle school teachers (61%). However, male teachers represent a majority at the high school level (68%) (Appendix 4). Male teachers are more highly represented in national and private schools than in public schools. Across all three levels of schooling, the ratio of female to male teachers is increasing (CBR tables 2.4, 2.5, 2.6). The

women teachers the review team met consistently emphasised the high social status for women in teaching positions plus other valued benefits, such as maternity leave. These were given as the key reasons women choose teaching as a career.

85. A lowered retirement age and the option of early retirement have impacted on the age profile of teachers. Significant numbers of more experienced teachers have now left the profession, enabling a large cohort of new and younger teachers to enter.

86. The vast majority of elementary school teachers (98.8%) are employed in public and national schools, rather than in private schools. This proportion decreases to 79% of middle school teachers and 51% of high school teachers who are employed in public and national schools (CBR tables 2.4, 2.5, 2.6). The percentage of part-time teachers is also very low, at least in upper-secondary education (0.6% of the total number of teachers, appendix 4).

Entry to Teaching

87. Student teachers receive a teacher certificate upon graduation from their initial teacher education programme. However, to hold a permanent teaching position in a public school the graduate must also sit the Teacher Employment Examination. The content of the employment examination is set every year on a national basis, although each metropolitan and provincial office of education can give additional weight to particular strengths they are seeking, such as information technology. The examination is administered by the metropolitan and provincial offices. To be eligible to sit the examination, candidates must hold a teacher certificate and be within the age restriction. The age restriction is generally set at 41 years, although there is some variation across regions, depending on the teacher supply pressures being experienced in each region. To sit the examination, prospective teachers apply to the metropolitan or provincial offices of education of the area in which they wish to teach.

88. The examination has two stages. The first is a written test, largely of a multiple choice type, held in November or December of each year. Candidates across the country sit the same test on the same day. The aggregate quota of teachers that will be appointed each year is determined by the MOEHRD.¹¹ The number of applicants that "pass" at the first stage is 120% of the aggregate quota. The second stage of the process is a further written test, a brief interview and short assessment of instructional ability. This takes place in January or February and determines which candidates will be offered a teaching position. As is the case for the College Entrance Examination, private tutors are also available to coach for the Teacher Employment. The actual school individual teachers are assigned to is decided by each metropolitan and provincial office of education.

89. The process is different for both contract teachers and teachers in private schools. Contract teachers may be employed without sitting the employment examination, but they must hold a teacher certificate. Generally, contract teachers are hired to fill vacancies of a temporary nature and to cover positions in shortage. Once teachers in public schools leave teaching they can only return as contract teachers, unless they re-sit and pass the Teacher Employment Test.

90. Private schools are free to use their own selection system, although, again, teachers can only be employed if they have a teacher certificate. Private schools are also permitted to appoint teachers who have been selected through the teacher employment examination. Some private schools advertise positions and assess candidates' suitability through an interview but instances still exist in which teachers are hired on

¹¹ It should be noted that, given that quota, each of the 16 superintendents of the Metropolitan and Provincial Offices of Education determines the number of teachers to be employed, often below the quota as a result of budget constraints.

the basis of personal connections and with no use of open competitions. However, education authorities have strongly encouraged open competition practices in recent years.

Demand and Supply

91. Changes in the demand for, and supply of teachers at different year levels, subjects and regions determine whether any particular pressures will be experienced. Currently in Korea, teacher supply pressures are evident in:

- elementary schools;
- some subjects; and
- some rural areas.

92. Recent pressure in the supply of elementary school teachers has arisen because of government policies of lowering the mandatory retirement age from 65 to 62 and encouraging early retirement. These two policies resulted in more than 22,000 teachers retiring between 1999 and 2000. At the end of 2000, there was a shortage of 7,800 teachers at the elementary school level. The change to the retirement age was not compensated at the time by an adjustment to the quota on the number of student teachers entering elementary teacher education programmes. Of course, even if the latter had occurred, the current situation would still have arisen as there is a four year lag before student teachers graduate. Currently, the employment rate for elementary teacher graduates is 1:1.1.

93. In response to these pressures in the elementary sector, the government has since increased the quota for elementary student teachers and allowed students already enrolled in other programmes to transfer to elementary teacher education programmes. Elementary schools have largely met the teacher supply shortfall through employing contract teachers. These tend to be qualified elementary teachers returning to teaching after a break or qualified secondary teachers who have acquired an elementary teaching certificate through supplementary training. In 2000, 6% of teachers in public elementary schools were contract teachers.

94. In secondary schools, the change to the mandatory retirement age has not been as significant, since there has been a much greater pool of graduate teachers available to fill teaching positions. The employment rate for secondary teacher graduates is 1:5. According to a survey conducted in upper secondary schools of 14 OECD countries (OECD, 2004), Korea is among the countries with fewer difficulties in hiring fully qualified teachers. In 2001, only about 2% of teaching posts still need to be filled by the time the school year began, the most problematic recruitment area being foreign languages (Appendix 4).

95. While retirement numbers have been boosted by older teachers opting for early retirement, the number of teachers who have left teaching for other jobs decreased considerably during the late 1990s. This change was the result of reduced employment opportunities in the wider labour market. Since then, retention rates have continued at a relatively high level.

96. The pressures relating to subject specialisation arise primarily from government policies on subject specialisation in elementary schools, in subjects such as music, art, physical education and English, and subject electives at the secondary school level. In elementary schools for 2001, the actual number of subject specialist teachers (10,464) was far fewer than the quota (18,869). In high schools, the lack of teachers to teach some subjects has limited the extent of subject choice for students.

97. Supply pressures also exist in some rural areas. These tend to be areas whose social and economic conditions are difficult in comparison to urban areas and therefore attract fewer teachers. Recruitment difficulties in these areas have translated into the widespread use of “out-of-field” teaching and the combination of different grade levels into single classes.¹² As an incentive, teachers who work in hard-to-staff areas receive bonus points for promotion. While this incentive will support recruitment, it will be limited in its impact on retention.

98. The demand for teachers is unlikely to increase because of demographic growth (Appendix 4). The rate of population growth, currently at approximately 0.77%, is expected to decline to 0.07% over the next 20 years or so. However, the demand for teachers will rise if the government’s intention to lower class size is realised.

Strengths and Challenges

99. Teaching continues to be an attractive career for many people in Korea, despite changes such as a lower retirement age, not always welcomed by teachers. The high number and apparent calibre of people continuing to enter initial teacher education will ensure schools are able to continue to fill their teaching positions with qualified staff.

100. Linked to this, however, is a challenge in better matching the number of teacher graduates and the number of teaching positions available. The supply of elementary teacher graduates is lower than historical levels but difficulties in filling positions seem to be largely limited to some rural areas and some subjects. That’s why the key issue is whether the quality of the new teachers is sound and adapted to the particular circumstances of the school where the placement occurs.

101. The existing over-supply of teacher graduates at the secondary level is problematic if it lowers the calibre of people entering secondary teacher education and undermines the quality of secondary teacher education in ways, such as impeding access to practicums in schools.

102. High teacher retention rates are also a strength, although in part this is likely to reflect the availability of alternative employment opportunities. Another factor contributing to this, however, is teachers’ satisfaction levels with their teaching roles. The teachers the review team met during their visit certainly relayed positive experiences of teaching and a commitment to their students, albeit they complained about a multitude of non-teaching “chores” which they had to undertake.

103. A particularly significant challenge the review team wishes to highlight is the current employment examination. The examination itself is limited in its ability to assess teacher graduates’ likely effectiveness as teachers. While we understand the government has increased the weighting given to the interview and assessment of instructional ability, relative to the written test, the examination still has a significant component comprising multiple-choice questions. This is unlikely to provide information on the depth of teacher graduates’ pedagogical and other skills. Furthermore, the interview and teaching assessment are of such short duration as to raise serious questions on their validity and reliability.

104. There is little alignment between the employment examination and initial teacher education curricula. Thus, the examination distracts students’ focus from their initial teacher education curricula, onto those aspects covered by the examination. Other limitations relating to teacher employment are that people are excluded from sitting the examination on the basis of age, and that the examination has to be re-sat by returning teachers, after being out of teaching for some time.

¹² In addition, the population exodus to urban areas has significantly reduced the number of students in certain schools.

105. A further challenge in the Korean teacher labour market is to ensure that the teachers appointed to schools are a good match to the particular needs and character of individual schools. Such a match is currently facilitated in private schools as they appoint all their own staff. Thus, some local autonomy in appointments does exist. But it was not clear to the review team whether all private schools use levels of transparency in recruitment to ensure that their greater autonomy result in teaching bodies which fit better their needs. We are aware that there is currently a pilot scheme to enable schools to appoint their own teachers and principals. We are also aware that some professional organisations of teachers oppose schools being able to select their own staff. Their concerns relate to ensuring transparency and fairness, from the perspective of teachers.

7: TEACHERS AT THE WORKPLACE

Features

106. The role of teachers in Korean schools and their core tasks and responsibilities are not defined in a clear manner by any existing regulation. The work of teachers evolves around the following key duties: teaching; class preparation; student assessment; communication with parents; student academic guidance; participation in school academic activities; managing classes and grades including administering the related paperwork; and supporting school's management.

107. However, in real practice, demands on teachers imply a broader involvement. In particular, the level of administrative work performed seems to go beyond their key obligations. An example is provided by the proliferation of the use of e-mail giving rise to a rapid increase in the number of official documents to be handled by schools which end up impacting on teachers' work (see Table 6.8 of CBR). Other tasks performed by teachers include the provision of assistance to the principal in school organisational matters, mobilisation for school events, counselling to students in non-academic domains, and surveillance of students and assistance during lunchtime for the younger pupils.

108. The level of support staff in schools is below OECD standards, at least in upper-secondary schools. According to a survey conducted in 14 OECD countries (OECD, 2004), Korea is the country with the lowest proportion of non-teaching personnel in upper-secondary schools with 18% compared to an OECD mean of 27%. Non-teaching personnel is distributed as follows as a percentage of school staff: 3% of management personnel (below the OECD mean of 5%), 2% of teacher aides (same as OECD mean), 1% of professional support personnel (below the OECD mean of 4%), and 12% of other support personnel (below the OECD mean of 17%) (Appendix 4).

109. It is the case that the number of support staff in schools has not followed the increase in the number of teachers that occurred in the past few decades with the exception of elementary schools. In fact, the ratio of teachers to support staff has been on the rise in middle and high schools, from 4.0 in 1970 to 8.6 in 2002 in both types of schools. By contrast, this ratio decreased in primary schools from 10.6 in 1970 to 5.4 in 2002 (Table 2.9 of CBR). Along the same lines, the absolute number of support staff has remained constant over the past three years (Table 2.8 of CBR). However, there has been a modest increase in the number of administrative assistants and computer assistants.

110. In terms of the organisation of the work, teaching hours are defined and teachers are required to stay a minimum number of hours at school (8 hours during weekdays and 4 hours on Saturday). However,

the distribution of hours per task outside the classroom is not defined, providing some autonomy to the individual teacher.

111. Teaching hours are above the OECD average for primary education – an average of 828 hours per year in 2001 against an OECD average of 792. By contrast, for lower and upper secondary education, teaching hours of Korean teachers are below the OECD average – 553 and 519 teaching hours, below OECD averages of 714 and 656 hours, in lower-secondary and upper-secondary respectively (Appendix 4).

112. Differentiation within the teaching profession is limited. Diversification in school roles includes only administrative positions – as principal or vice-principal. Roles as mentor for beginning teachers, supervision of classroom instruction for different grade levels, clinical supervision, field research, leading school-based professional development activities are hardly found in Korean schools, and no mechanisms exist to regulate their existence.

113. An aspect that has made the work of Korean teachers particularly challenging is the typical size of classes. Despite the substantial efforts undertaken by Korean educational authorities to reduce class size, Korea remains the OECD country with the highest average class size both in primary and lower secondary education with more than 35 students per class (Appendix 4). Despite this, they still benefit from a favourable disciplinary climate – Korea ranks 5th among 28 OECD countries in an index of good disciplinary climate in schools attended by 15-year-olds (Appendix 4).

114. The facilities for teacher preparation and planning in the schools visited by the review team were particularly impressive in that they often consisted of an individual desk space and computer. In those schools, teachers seem to benefit from conditions permitting them to carry out all their tasks at the school, as opposed to the reality in many other OECD countries. Furthermore, the facilities for teaching and the instructional materials were of good quality, the ICT infrastructure being particularly impressive (see Box 1). The team was assured that this was the case for the generality of schools.

Box 1: ICT support for teachers and students

The provision of ICT support for teachers and students is particularly impressive in Korea. It is the result of the effort initiated in 1996 with the *Education Informatization Affirmative Master Plan*. Currently, on average, all Korean teachers have been provided with a computer (best ratio of teachers to computers in upper-secondary schools in a group of 14 OECD countries, OECD, 2003, Table D3.3), classrooms are often equipped with big-screen TVs with an internet connection, all schools across the country are linked to the Internet, and a high-percentage of teachers has undertaken in-service training in ICT activities. In addition, two major online services have been launched.

Edunet (www.edunet.net) is a comprehensive educational information service which grants students, teachers, and the general public access to educational information and allows the creation of online learning communities. It is managed by KERIS (Korea Education and Research Information Service) and, as of June 2002, it had 5.3 million members. Among other services, it offers a “Teaching and Learning Resource Center”. Teachers have access to multimedia teaching resources, designed to allow teachers to use ICT in their classes. The system is based on the 7th Curriculum and provides various forms of data, graphics, sound, moving images, animations, etc. Students have also access to a “Cyber Teacher” online service provided by qualified teachers and comprising ‘subject advice’, ‘help in learning’ and ‘questions and answers’. Another innovative project is the *Teaching and Learning Center* (<http://classroom.kice.re.kr>) run by KICE (Korea Institute of Curriculum and Evaluation). It provides comprehensive information on the 7th Curriculum, disseminates innovative teaching strategies and good practices, and provides extensive teaching materials, guidelines and assessment tools.

These initiatives bring several stakeholders together (universities, teachers, students, schools, parents, industries, administration) and foster similar schemes at the school level – see the excellent websites of two of the schools visited: Donggoo Girls’ Commercial High School (www.donggoo.hs.kr) and ChoongAng Middle School (www.choongang.ms.kr). School websites function as a strong communication channel among teachers, parents, students and the communities and bring in a new level of transparency for the quality of the services provided.

115. The organisation of the work within the school seems to be very hierarchical and often depends on the characteristics of the principal, the key individual to define the level of collegiality among school staff. Similarly, the authority of the principal seems to define teachers' opportunities for collaboration and decision-making. This hierarchical culture makes it more difficult for teachers to be critical friends or peer evaluators to one another.

116. Another aspect that is perceived by teachers as making their work more difficult is the ever-rising level of demands of parents, which often pressure teachers to pay special attention to the specific needs of their children.

117. As regards the level of teacher absenteeism, it is considered low and has never emerged as a serious issue in the Korean context (Appendix 4).

Strengths and Challenges

118. The favourable aspect that stands out the most regarding the work of teachers in Korean schools is the availability of good conditions for preparation and planning. This permits the presence of the teachers in the school during the day, when they are not involved in teaching. It also facilitates the development of a sound work ethic and fosters teachers' engagement with the general life of the school.

119. Despite these positive aspects, the work of teachers in schools is currently faced with important challenges. A major one, more significant in secondary schools, is the conflict that teachers face between the demands of the Seventh Curriculum – requiring teachers to get away from teaching-to-the-test – and the pressure that parents exert in order for their children to be prepared for the still dominant College Entrance Examination. In reality, the team encountered little evidence showing that teachers' pedagogic style has changed to be aligned with the aims of the Seventh Curriculum.

120. A second difficulty is caused by the lack of a clear definition of the tasks and roles for teachers in schools. The implied lack of clarification gives rise to an excessive broadening of the tasks performed by teachers, some of which definitely question their professionalism. In addition, it risks introducing unevenness in teachers' workloads as some of those tasks are undertaken on a voluntary basis.

121. Two additional problematic factors which overburden teachers are the average size of classes and the lack of adequate levels of support staff. Class sizes are still too large to allow for adequate individual pupil attention and guidance. In addition, teachers perceive that their job is becoming more demanding, including more administrative chores, and that they want to be able to focus more on their key responsibilities.

122. Moreover, classes on Saturday morning seem to contribute to an excessive workload for both teachers and students.¹³ Also, beginning teachers do not seem to benefit from a reduced teaching load and structured support is not systematically offered to them. Finally, the little differentiation within the profession gives little room for teachers to diversify their role in schools and to respond to specific needs such as the mentoring of beginning teachers.

¹³ Note that working on Saturday morning is common among Korean employees but the five-day working week is gradually being introduced in all sectors.

8: TEACHER'S CAREER STRUCTURE AND INCENTIVES

Features

123. Teachers in public and national schools are appointed by the metropolitan and provincial offices of education but their employment status is that of national public servants. Teachers in private schools are appointed by and are the legal employees of the school foundation, typically the owner of these schools.

124. Currently in Korea there is a debate on changing teachers' employment status to become employees of the metropolitan and provincial offices of education. Local governments have suggested this change to better fit the spirit of local educational self-governance and to be equitable with the conditions of other public servants. Teachers oppose this proposed change. They claim it would lower their status and morale. Teachers are also concerned that their relative salary levels could be negatively affected by financial imbalances between, for example, cities and provinces. Teachers assert that this could result in teachers in different areas being paid different salaries.

125. Teachers in Korea have guaranteed tenure until they reach the mandatory retirement age. This is currently set at 62 years, having been recently lowered from 65 years. Many teachers consider this change has lowered the attractiveness of the teaching profession.

126. Teachers also have access to early honorary retirement, which is voluntary retirement prior to the mandatory retirement age. To encourage teachers to opt for early retirement, an additional allowance is paid on top of the retirement grant. Both the lower retirement age and the availability of early retirement resulted in a significant loss of teachers, i.e. over 40,000 in 1999 and 2000. Nearly 75% of this figure were teachers who had opted for early retirement.

127. The salaries of all teachers, including those in private schools, are set centrally by government. Teachers' salaries are included in the same legislation as that for other national public servants. Thus, it is considered to be difficult to adjust teachers' salaries without making similar adjustments to those of other national public servants.

128. Teachers' salaries comprise base salary and a great number of allowances. There is a single salary scale for elementary, middle and high school teachers. Starting salaries are determined by level of qualifications and progression is based on years of experience. There are 40 steps in the salary scale.

129. Allowances are paid for particular responsibilities, such as department head, teaching students with special needs, serving in in-service training institutions and to meet costs incurred by teachers. The types of costs included are for books used by the teachers and tuition fees for the teachers' own children. Allowances are also offered for teaching in a remote area and for family support. The allowances vary in size, depending on the particular type and purpose. Principals and vice-principals also receive allowances to recognise their particular responsibilities, in addition to their higher base salaries. Allowances make up a significant proportion of total remuneration, approximately 60%, but are not included in teachers' pensions. This, unsurprisingly, is a point of contention amongst teachers.

130. At the top of the scale, salaries of teachers in Korea are among the highest in OECD countries. The situation is not as good for other stages of the career but, relative to other OECD countries, remains fairly favourable. Also, teachers recently benefited from salary raises in real terms between 1996 and 2001 (Appendix 4). However, relative to other occupations within Korea, teacher salaries are sometimes modest

(especially for beginning teachers)¹⁴ and the career structure somewhat rigid. Alongside this, however, there are significant non-pecuniary benefits such as guaranteed life-time employment.

131. Negotiations on teachers' salaries, and other conditions, do occur between the MOEHRD, the Metropolitan and Provincial Offices of Education and teachers' representatives. However, the agreements arising from these discussions are not binding and are, therefore, not necessarily implemented.

132. The length of each teacher's annual leave is determined by his or her length of service. After one year of teaching, teachers are entitled to 10 days annual leave. This entitlement increases in steps until 6 years of service, at which point teachers are entitled to 23 days of annual leave. After 20 years of service, teachers receive 10 days of long service leave.

133. Teachers at public schools are required to move to a different school every 5 years. Principals may, however, request that 10% of their teachers remain for a further 2 years. This requirement does not apply to principals and assistant principals, nor does it apply to private schools. There does not appear to be a great deal of movement of teachers between private and public schools.

134. There is a single career ladder progressing from Grade 2 teacher, to Grade 1 teacher, through to vice-principal and principal (see Figure 2 of CBR for structure of teacher promotion). Within the career structure there are few opportunities for teachers to take on additional responsibilities, such as department head.

135. The promotion system is a national one. Thus, there is no tailoring or weighting for the needs of particular areas or schools. Promotion is based on a points system comprising the following four components:

- length of service (90 points);
- performance (80 points);
- in-service training and research achievement (30 points); and
- various other educational activities, such as teaching in remote areas or in special schools (12 points).

136. In addition, there are separate qualifications for both principal and vice-principal positions. To gain a principal certificate, the candidate must have been in a vice-principal position for more than three years and meet the qualification criteria for principals. Competition for vice-principal and principal positions is very strong. Generally, fewer than 1% of teachers are promoted to vice-principal positions each year. Most teachers who are promoted to vice-principal and then principal positions have 25-30 years of teaching experience, and are therefore aged between 50 – 55 years.

137. The government has given some consideration in the recent past to a new designation of "head teacher", to recognise experienced teachers who wish to remain teaching rather than moving into

¹⁴ As illustrated in Appendix 4, salaries of teachers relative to GDP per capita are high. However, this indicator is limited because it is based on statutory rather than actual salaries, financial benefits other than salaries are not included, and the reference point, GDP per capita, does not reflect salary levels in comparable occupations. A more appropriate indicator would compare teachers' actual salaries and other benefits with workers in professions requiring similar qualifications and at similar age levels. Such data are not yet available at international level.

management positions. The number of such positions would be limited to, for example, 10% of teachers. The KFTA supports the head teacher proposal, on the proviso that there is no limit on the number of teachers that can be promoted to this position. The KTWU opposes the idea entirely, on the basis that it would introduce further hierarchy in schools and reduce the autonomy of teachers. A survey of teachers on the head teacher proposal indicated that most teachers who responded to the survey (68%) support the proposal (Park, 2001).

Strengths and Challenges

138. The range of allowances that is currently available enables some recognition of additional responsibilities. This differentiation provides an incentive for teachers to take on such responsibilities and recognises the value these roles provide to schools.

139. A further strength is the system of early retirement, which provides a means for teachers to leave the profession in an honourable manner, prior to the mandatory retirement age, while still being able to access their pension. Given the challenging nature of teaching and the need to keep up-to-date with pedagogical and other developments, this is a positive option.

140. The system of incentives, however, is not well linked to teaching effectiveness. While there will always be a degree of subjectivity in evaluating performance, strong links are important in attracting, motivating and retaining high calibre people in the teaching profession. The current heavy weighting on length of service for both salary progression and promotion raises concerns.

141. The review team noted that an attempt was made in 2001 to introduce a merit-based bonus system, but that difficulties were experienced in implementing this new system. This system may have been too different from current practice to be viable at that time, and a more gradual introduction of links between remuneration and performance may be more successful.

142. In addition, there seem to be insufficient incentives for teachers who wish to remain primarily in a teaching role, but wish to increase their contribution to the school. The head teacher proposal would address this issue, to some extent.

143. There need to be incentives, however, for all teachers to maintain and further develop their teaching effectiveness. The review team notes that there is no probationary period for new teachers, although there is some pre- and post-appointment training. We note that probation periods for new teachers do exist in some private schools. There is also no requirement for teachers to be reassessed to retain their teaching certificates at any point in their careers. One commentator noted that a change to this requirement would elevate the status of the profession amongst the general public and would provide incentives to support and undertake professional development. We are aware, however, that the notion of certificate renewal is not supported by teachers' representatives.

9: SCHOOL MANAGEMENT, EVALUATION AND ACCOUNTABILITY

Features

144. The structure of school management in essence consists of a principal and a vice-principal. The principal is the dominant figure. He/she establishes the educational plan, supervises the work of teachers, liaises with school authorities and ensures the school follows the established regulations. Vice-principals are involved in school administration, support teachers' work, and supervise the operation of the school. With the exception of a few vice-principals, the school management does not have teaching duties.

145. Principals are also adapting to new realities in Korean schools. They used to be considerably more dominant before the educational administration introduced accountability policies in relation to their work and unions became part of schools' lives. Some express concern as they find themselves confined in between educational authorities and teachers.

146. Another group playing a role in school decision-making is the newly-established School Council comprised of the principal, teachers, parents and community members. Currently, the School Council has an advisory role and its degree of intervention depends to a great extent on the authority of the principal.

147. Teachers are expected to be evaluated each year by the principal and vice-principal. The evaluation covers teaching performance and professional attitude and might include classroom observation. Prior to the evaluation, teachers prepare and submit a self-evaluation report. School management subsequently uses an evaluation instrument (*Performance record evaluation table*) to assess the performance of teachers. The assessment is then formally used for promotion decisions. The vice-principal is evaluated by the principal and the school as a whole is assessed by the metropolitan and provincial offices of education.

148. Despite the requirement for annual evaluations of each teacher's performance, there is no legal means to require teachers, whose abilities or attitudes inhibit their effectiveness as a teacher, to take actions to improve their practice. As noted earlier, teachers have guaranteed tenure, regardless of the demand for teachers in particular areas or subjects, and also regardless of whether the teacher is continuing to perform effectively. However, in rare circumstances, teachers can be dismissed for breaching regulations or neglecting their professional duties.

Strengths and Challenges

149. A favourable aspect is that prior to become a principal or vice-principal an individual needs to undertake specific training in order to obtain the principal or vice-principal certificate. The training courses, offered on a limited basis only to the candidates needed, usually involve 180 hours attendance and are free of charge. Another positive feature is that there is a high number of quality candidates for leadership positions as a result of the higher status and unique opportunity for promotion.

150. However leadership in schools seems to be highly concentrated on the figure of the principal. Hierarchy is highly pronounced and the involvement of teachers in the operation of the school is delimited by the level of openness of the principal. The scope of intervention of the School Council is restricted and still not in accordance with the role recommended by the PCER Report (PCER, 1996) for public schools: "The council will deliberate budget bills, settle financial accounts, propose elective courses and other educational programs..."; "It will make decisions about the appointment of the principal and teachers..."; and "It will also be consulted with regard to the whole spectrum of managerial affairs".

151. Furthermore, as explained before, the scope of school decision-making remains limited despite the attempts to increase the level of autonomy of schools. The role of the school leader remains largely administrative rather than educational. In public schools, where more restrictions apply, principals have little flexibility in the uses of school funds and have limited influence in shaping the development of teachers' careers.

152. Leadership positions correspond to the top of the teaching career ladder, raising concerns at two levels. First, it is not clear whether the motivation for a leadership role comes from an interest in school development. It might simply arise from an interest in being promoted. Second, individuals that reach leadership positions are typically aged between 50 and 55 years old. The new values and enthusiasm of younger staff can therefore not be fed into the leadership of schools.

153. As regards evaluation, the positive aspect is that teacher and school evaluation exist, some instruments for evaluation are available, evaluation might include classroom observation, and the assessed performance is considered in promotion decisions. Also, the concept of "open class", wherein classrooms are open to parents', colleagues and teacher students once/twice a year, is well established in Korean schools (see Box 2).

Box 2: *Open classes in Korean schools*

Korean schools have developed the tradition of periodically opening up teacher classrooms to the observation of colleagues, school management, and parents. On a voluntary basis, typically once or twice a year, most schools in Korea have some teachers invite colleagues, administration personnel or parents to attend their classes. This initiative serves different purposes: (i) to promote innovative and successful teaching practices; (ii) to facilitate exchanges of lessons and experiences among colleagues; and (iii) to improve the collaboration and dialogue with parents.

Open classes are of four types: (1) targeted at teachers from the same grade level or subject, with a focus on peer review; (2) targeted at the school administration and all teachers in the school, with a focus on clinical supervision; (3) targeted at parents with the objective of developing trust and improving acquaintance with curriculum objectives and teaching practices (in which case, they tend to be organised within the context of a broader school festival); and (4) offered by 'innovation teachers' designated, for a year, by the regional office of education in a special programme to promote innovative teaching practices; 'Innovation teachers' undertake research and design innovative teaching practices which they present in *open classes* to colleagues (including from other schools), inspectors, administrators, and parents; The regional offices of education provide funds to encourage and support this programme (about US\$1,000 per school per year) and 'innovation teachers' are selected on the basis of individual applications.

Each *open class* is typically followed by a discussion among observers. These identify strengths and weaknesses and provide suggestions for improvement. The feedback from parents is also expected. For the first three types of *open classes*, identified best practices are potentially shared with wider audiences through school-based in-service training. In the case of 'innovation teachers', a team of evaluators attends the class and teachers presenting particularly innovative approaches obtain 'bonus points' for promotion.

There are conflicting views regarding the effects of *open classes*, however. Some analysts argue that they provide valuable opportunities for reflection and improvement of teaching practices, instances for collaboration among teachers, and unique occasions to communicate with parents. Others argue that no real improvement in teaching-learning is observed, teachers' involvement is mostly driven by potential promotion, and that the heavy burden that *open classes* imply translates into very few teachers volunteering for offering an *open class*. Nevertheless, *open classes* are considered by educational authorities an important mechanism through which public education can be improved.

154. However, evaluation and accountability principles are still incipient in Korean schools. Above all, the evaluation of teachers seems to be inconsequential, with no systematic implications on the career development of teachers. For example, if the principal identifies areas for improvement for a given teacher, he/she has no means to ensure the teacher will undertake professional development activities in those

areas. Hence, there are no institutionalised means to guarantee that teachers continue to perform effectively. Similarly, even if formally the assessed performance is considered in promotion decisions, the review team had the impression that in practice the current system serves little the purpose of differentiating teachers on the basis of their performance.

155. Furthermore, it was not clear to the review team whether the evaluation focuses on the competences that are most relevant. The current system is also criticized by teachers on the grounds that it lacks objectivity, fairness and clarity.

10: POINTERS FOR FUTURE POLICY DEVELOPMENT

156. The suggestions that follow are intended to help the Korean school system meet the challenges of attracting, developing and retaining effective teachers. They seek to build on initiatives that are already underway and are based on the review team's observations, discussions and reading, especially of the policy discussions in the comprehensive Country Background Report (Kim and Han, 2003). They are offered for evaluation and debate.

Sustaining the Reform

157. Education reform in Korea was launched on solid grounds with strong arguments, societal consensus, and a clear identification of the problems to be faced. Its principles are widely accepted and there has been consistency in the political policy towards it. Paradoxically, however, despite the existing societal compromise to establish the new educational culture, the implementation of the reform has been problematic. The system is still heavily exam-driven, dramatically competitive, persistently focused on the transmission of knowledge and acquisition of facts, and accommodating a private tutoring system with an intolerable impact on the lives of Korean children.

158. The immediate reaction of the education system should be an investigation about the obstacles that have prevented the education reform from being implemented to its full extent. Major research should be undertaken on the implementation dimensions of the reform, identifying the current impediments and suggesting strategies to overcome them. This also suggests that the implementation aspects of reforms should be addressed at the time of their development.

159. It is perceptible that the deep-rooted competitive-exam-driven attitude of Korean people towards education calls for a rather drastic transformation of mentalities if the introduction of a new culture of education is to be successful. This might necessitate some political bravery, for instance, by radically reducing the importance of the college entrance examination and developing sound strategies to substantially reduce the presence of the private tutoring system. Without doubt, what is needed in the years to come is a strong, sustained, political will in order to bring the education reform to fruition.

160. Another priority area for policy development is the strengthening of consultative procedures between the education authorities and teachers and their representatives – unions and KFTA. Teacher unions have only become established in Korea in the past few years, and there is understandably uncertainty on all sides as to the role that they could or should play in educational developments. We formed the impression that, at this early stage, the relationship between the educational authorities and the unions could be described as mutually suspicious, and even confrontational in some respects, as each

adjusts to the new industrial relations and professional context. The risk for Korean education is that an adversarial set of relationships becomes entrenched. If this happened it would be difficult to bring about the changes in Korean schools that most of the people and groups we met said they would like to see. Experience from around the world indicates that unless teachers and their representatives are actively involved in policy formulation, and feel a sense of “ownership” of reform, it is unlikely that substantial changes will be successfully implemented. On the other hand, teachers and their representatives should not be able to exercise a veto over education reforms that are mandated through democratic political processes. To do so would be to risk losing the public support on which education so critically depends. It is difficult to find the right balance, but open and on-going systematic dialogue and consultation across the broad range of educational matters is fundamental to the process.

161. The current level of school autonomy and involvement of local actors in school development remains unsatisfactory. It is, therefore, suggested that the government explore ways to grant teachers, parents, and school managements better instruments to develop schools with an identity which reflects local aspirations. There is considerable scope to develop the roles of the recently established school councils.

Improving Initial Teacher Education

162. Because of the centrality of a qualitative teacher education system, attuned to the needs of national policy, it is essential that this matter gets high priority from the Ministry and involved agencies. The traditional model is not satisfactory, and moves to reform it need to be accelerated. It could be said that school curricular reforms were designed with insufficient attention to their implications for teacher education, where reform does not tend to come quickly, and which has been placed very much in a “catch up” situation. In essence, there needs to be a reconceptualisation of the philosophy of teacher education, with a view to placing the needs of student teachers at the centre of programme planning. Such an articulation should provide guidelines for priorities in teacher formation. The concept of student learning which should evolve ought to lead to a re-appraisal of course content with a much reduced lecture load, but with increased opportunities for student’s active engagement and independent learning. The Ministry for Education should be part of this re-thinking and provide a profile of the characteristics, knowledge and skills expected of teacher education graduates for the implementation of new national policies for schools.

163. A crucial aspect of future teacher education courses ought to be extended provision of good quality teaching practice, conducted at appropriate intervals throughout the course. Teaching practice needs to be regarded as a central element of student teacher formation and its duration, sequencing and character should have greater priority in course organisation. This should be accompanied by careful planning with the schools providing teaching practice placements. The Ministry should use its good offices in encouraging schools of good standard to participate. A partnership approach should be adopted by the universities towards such schools, and mentor training be provided for school-based personnel. The training institutes’ supervisors should work in association with these mentors, who ought to get some credit for their inputs by means of reduced fees for in-service courses, or reduced teaching hours in the schools. Greater use could profitably be made of videoing students’ practical teaching for later analysis in small group sessions, with tutorial advice, in the training institutions.

164. Teacher education course content needs to be less formally academic and involve more attention to the content and objectives of the Seventh Curriculum. Efforts need to be made to ensure that personnel dealing with the pedagogy of subjects for school pupils should themselves have some experience of teaching the subjects at school level. School teachers with experience and expertise of teaching the subjects could be recruited, even on a part-time basis, for teacher education purposes. It would also be desirable that the teaching profession has some consultative input to the content of teacher education courses.

165. Greater efforts are required to improve the student-staff ratios in all teacher education institutions. The current high levels inhibit efforts to give more individual attention to students and to utilise small-group teaching methods.

166. The moves towards accreditation, initiated in 1998, need to be strengthened and applied in a systematic structured way to all teacher education institutions and courses. This is particularly important with regard to the multiplicity of courses now on offer for secondary teacher education. The accreditation process conducted in a thorough manner could be of assistance to the government in enforcing tighter quotas and more strict entry procedures to secondary teacher education. At present, with the vast over-supply of candidates, some of whom do not intend to go into a secondary teaching career at all, there is a serious danger of an undermining of the standards and image of secondary teacher education. The review team is aware of the government's desire to merge elementary and secondary teacher education. However, it did not encounter a convincing rationale for this. The team is not convinced that it is the best solution for the difficulties at present, even if formidable sectoral opposition could be surmounted. While sharing common elements, there is much that is specific about teacher education for children of elementary school age and for teenagers at secondary level. The team formed the view that, with some reforms, the framework of elementary teacher education has a good deal to recommend it. The problems are greater in, at least, some of the secondary teacher education courses. A more pro-active policy stance is required here within which accreditation, student quotas, programme reform and increased investment in facilities and equipment are combined to deliver the modern progressive form of teacher education that is required. If courses in comprehensive universities continue to be recognised, the institutions should be required to give more support and academic affirmation to their teacher education programmes. At present, there are considerable differences in the traditions and approaches to teacher education for elementary and secondary levels. A political move towards institutional re-organisation and re-structuring would face many difficulties and be very time-consuming. The urgency is to get programme reform, particularly at secondary level. This needs to be a major priority of policy. If these badly needed reforms are achieved, in the first instance, the moves towards more integrated institutional arrangements between both forms of teacher education may have greater chances of success.

167. If the accreditation of courses were satisfactorily instituted, a more academically rigorous approach could be adopted for the institutional certification of student teachers. The institutions should be required to take the responsibility of assessing their students in all aspects of their courses – theoretical and practical. There need to be quality assurance mechanisms in place for the provision and certification of courses. Following a four year teacher education course the institution should be able to stand over its evaluation of students, with the successful students getting their license to teach, subject to a probation period in a school. This would obviate the need of the current Teacher Employment Test, which at present is divorced from the teacher education programmes, and has serious shortcomings. In particular, the interview and practical teaching tests, of a short few minutes duration, cannot be other than superficial. There is an over-reliance on multiple choice tests with regard to professional suitability. The review team considers that the issues of accreditation, certification and the teacher employment test are interconnected. It is recognised that the policy changes proposed involve significant changes for established practice in Korea. However, in the long term interest of teacher education reform they need to be grappled with, and strategic steps need to be taken, with sustained political will, to achieve worthwhile reform.

Supporting the Continuing Professional Development of Teachers

168. High quality continuing professional development for teachers is an essential requirement for the reform process. Due to inadequacies in traditional modes of provision it is desirable that a re-conceptualisation of such in-career development needs to be undertaken. This should draw from experience, the views of key stakeholders, international good practice, and research findings. Instead of piecemeal, fragmented and outmoded practice, there needs to be a clear vision of what is needed, a

coherent articulation of a provision plan, and specific guidelines on modes of delivery and evaluation. There needs to be tighter quality control and accountability of what is provided. As well as a more formal approach to the evaluation of courses, more research is required on the value-added aspects of in-service teacher education for teacher performance and for pupil learning.

169. The quality control dimensions ought to lead to a rationalisation of the institutions and courses involved in in-service teacher education. While there are virtues in a variety of providers answering to particular needs, without better quality control there is a danger of uneven standards prevailing, and there is evidence that poor quality provision exists. The calibre of the personnel providing continuing professional development courses is of crucial importance. It was not at all apparent to the review team that many people involved in the delivery of courses had the academic background, relevant experience and skills, and the well-informed orientation and motivation to carry conviction with regard to the type of in-service provision now required. The background and experience of many senior personnel were rooted in an older tradition. Accordingly, it is recommended that more care be put into the selection of personnel to work as facilitators on teacher education courses, even if restrictions result in the multiplicity of provision which currently exists. It is a time when quality rather than quantity of provision should be the emphasis. It is also the view of the team that some personnel involved in in-service training should be supported by scholarships to work and train abroad in countries with progressive formats of career development training. Potential facilitators in continuing professional development courses ought also to get priority on Masters or Educational Doctorate programmes which may be devised to promote the knowledge, experience and skills for high quality in-career teacher education. Personnel who benefit from such experiences could be catalysts for re-invigorating approaches to in-career development for teachers.

170. As regards the induction of teachers beginning their teaching career, the review team considers that a more comprehensive and systematic policy approach should be adopted, drawing on current experience, but giving more structured support, particularly in the first year through a reduced work load and the support of a designated mentor.

171. The methodology of much in-service training needs to be overhauled. This would involve less reliance on mass lectures, greater input to content by participants, a wide repertoire of teaching-learning approaches involving aspects such as workshops, experiential learning, role play, simulation exercises, the use of videos and ICT equipment, hands on projects, and action research themes. Skilled teaching practitioners should form part of the facilitating teams to work with their peers, thereby building professional confidence and empowerment within the teaching force. The review team was informed that there was considerable overlap between the content of initial teacher education and in-service courses leading to Grade 1 teacher qualification. The content, methodologies and purposes of continuing professional development should be clearly seen as distinct from those of initial teacher education. The in-service courses must be seen by teachers as addressing real issues and concerns, and must engage with teachers in ways which respect their professional status, and draw on their teaching experience. The seminar and workshop approach is more appropriate than the lecture method.

172. A significant new feature of the Korean education system is the extent to which the parental role has become more organised, articulate and confident in relation to their children's schooling. As part of the *Rapprochement* and cultivation of partnership by agencies within the system and parents, it is important that teachers are prepared to relate with parents in new, professional ways. There are significant interpersonal skills involved including understanding, communication, empathy, patience, encouragement, and so on. In a more traditional role the teacher was regarded as "the master" whom one did not question much. Contemporary parents are generally more educated, better informed, more demanding and teachers have to be accountable to them for inputs to their children's education, on which many parents place so much importance.

173. To help enrich practice from international experience, the MOEHRD has established the “Long-Term Overseas Study Programme for Teachers”. This provides selected teachers, with good track records, to acquire academic degrees at overseas educational institutions, with stays of up to two years. The purpose is to allow such teachers to engage with particular programmes and instructional activities which are seen as being potentially valuable to Korean education. This is a commendable move to broaden the experience of a cadre of Korean teachers and to benefit from international good practice or innovative work. There are plans to extend the scheme to more beneficiaries. This continuing professional development programme, while worthy, is expensive. It was not clear to the review team what structures were in place to ensure that maximum benefit derived to the system from the engagement of the involved individuals. It is desirable that procedures exist so that maximum benefit can be gained through feedback reports, engagement by those who benefited from the scheme in in-service courses, seminars, conferences etc. for Korean teachers.

174. The review team was impressed by the research agenda and achievements of the Korean Educational Development Institute (KEDI). The team also benefited from a seminar with researchers from a number of universities. However, it seemed that very little research was focussed on initial or in-service teacher education, despite the crucial importance of these areas to contemporary Korean education. For instance, of the thirty two research studies reported in KEDI's *Research Abstracts, 2001-02* none of them dealt with teacher education. KEDI is an impressive research institute by international standards. It has four research centres which conduct a wide range of research studies. It would be desirable if teacher education came under its remit as an area worthy of research. It would also be beneficial if research resources were available to some of the major institutions involved in teacher education so that they, too, could engage in more focussed research and evaluation studies of initial and in-service teacher education.

Improving the Effectiveness of the Teacher Labour Market

175. Given that teaching still attracts good numbers of quality candidates, the current challenge is to improve both the selection of teachers and their matching to schools while addressing the few areas of shortage.

176. In order to provide targeted responses to shortages, the incentive structure should be used in a more flexible manner. For instance, pay differentiation to account for shortages, allowances for teaching in difficult areas, or transportation assistance to promote mobility should be given careful consideration for future policy development. The adaptation of the incentive structure to the stratified structure of the market can also be undertaken by differentiating non-monetary incentives. For instance lighter workloads could be considered in socially difficult areas. Some promising initiatives have been taken in this regard. This is particularly the case of the allowance provided to teachers employed in remote areas.

177. Another possibility is to expand the potential supply pool. This can be achieved, for instance, by opening the teaching profession to individuals with relevant experience acquired outside education and by implementing a structure that could guarantee their pedagogical preparation. This would imply the development of an incentive structure that is able to recognise the qualifications, skills and seniority acquired outside education – measures in this area have already been undertaken by the Korean government. Another way of expanding the supply pool is through an increased mobility of teachers across educational levels something that can be achieved by the introduction of greater flexibility in teacher education programmes – as a result of the shortages in primary schools, encouraging steps have been made in this respect.

178. As regards the improvement of the selection of teachers and their matching to schools, two aspects seem particularly important: the Teacher Employment Examination and the participation of schools in the selection of teachers.

179. The current teacher supply pressures at the elementary school level mean the employment examination is adding little value in selecting teachers for appointment, since most teacher graduates who apply are appointed. This situation provides an ideal opportunity to experiment with, or introduce a different system for appointing new elementary teachers. As noted earlier, the employment examination has significant limitations in evaluating likely teaching effectiveness. Teaching effectiveness is dependent on a complex combination of skills such as communication, conceptual thinking and creativity, as well as pedagogical and curriculum knowledge. The current examination does not assess these skills in any depth. This is particularly relevant in the current context of the selection of teachers from a sizeable pool of applicants for secondary education.

180. The substantial costs associated with the acquisition and interpretation of information influencing selection decisions limit the efficiency of the selection. A more direct interaction through personal interviews, work assignments discussed with applicants, acquaintance of schools by candidates, teaching demonstrations are costly approaches but are likely to have a substantial impact on which candidates are selected and how fully committed they become to the mission and the work requirements of the jobs they eventually accept.

181. This calls for a greater say by schools in the selection of teachers. Having schools involved in the recruitment and selection of teachers increases the efficiency in addressing school-staffing needs as schools are better able to identify their specific necessities. In particular, school principals are granted better conditions to build their own school team potentially leading to a well-defined identity. However, some complexity might be involved; there is the potential of an inequitable distribution of teachers; and the possibility of favouritism in teacher selection by schools. The latter aspect can be addressed by introducing accountability policies leading schools to systematically organise open competitions to fill teaching positions and forcing them to become more responsive to local needs through the inclusion of parents and community members on decision-making committees. The inequity aspect can be tackled by providing additional resources to those schools located in difficult areas.

Supporting Effective Teachers

182. The conflict that teachers face as the result of the introduction of the Seventh Curriculum needs to be addressed in the broader context of the necessary transformation of mentalities that needs to occur for the successful implementation of the education reform. It seems clear, however, that initiatives to support teachers in their adjustment to the Seventh Curriculum should be a priority as teachers certainly are the major vehicle for embedding the values of the education reform. This should be complemented by initiatives seeking to defend teachers from contrary pressures exerted by parents.

183. Serious consideration should be given to the development of a "Job Profile" providing a clear definition of roles, responsibilities and tasks, including a description of resource needs – time, assistance, infrastructure, and materials. The profile should make clear what tasks do not fit the professionalism of teachers.

184. The class size reduction policy should continue until Korea reaches figures typical of the OECD area, namely in light of the objectives of the Seventh Curriculum. Such policy should preferably target the student populations that benefit the most – lower-grade levels, socio-economic disadvantaged areas, and children with special needs.

185. It is also advisable to introduce more support staff in schools. The current target of assigning one administrative assistant to each school by 2005 should be accomplished. Likewise, the number of other professional staff who provide student services such as guidance counsellors, librarians and psychologists

should be increased. A further needed initiative likely to contribute to a reduction in teachers' workload is the restriction of administrative chores, namely paperwork, to a minimum.

186. A supportive school leadership is also vital for the efficacy of teachers' work. High quality school leadership is a *sine qua non* condition for school development. It is a difficult and complex process in contemporary circumstances calling for many qualities including knowledge of educational philosophy, inter-personal skills, managerial flair and transformative leadership. At present, the administrative track leading to promotion is associated with a greater status and entails the acquisition of the certificate for principal and vice-principal positions but does not necessarily lead to the most appropriate training for the leadership positions. The training for these posts should be a distinct entity and involve genuine courses in educational leadership, including instructional leadership.

187. In addition, access to school principalship should not be confined to older teachers; the energy and enthusiasm of younger staff who have the desired abilities can be of great value in achieving change. The Ministry has also been considering the concept of "consecutive" periods of appointment rather than lifetime appointments for principals, and there is much merit in this for appointments in the future. It is also desirable to extend the level of collegiality of leadership in schools, including through the broadening of the scope of intervention of the School Council. Finally, the introduction of more administrative staff in schools is desirable as it offers the potential for school leaders to further concentrate on educational rather than administrative tasks.

Ensuring a Rewarding and Effective Career

188. The system of incentives and the career structure for teachers should encourage and reward teachers to continually develop their professional learning and effectiveness. In addition, there need to be measures to address performance issues when these arise.

189. We consider that closer links between teacher rewards and teaching effectiveness should be established. As an initial start, a stronger relationship between performance and pay progression on the salary scale would be useful. For example, salary progression could be deferred if teachers had not met the stated expectations of performance or could progress two salary steps at once if their performance was exemplary. Reward measures for quality performance might also include features such as the provision of sabbaticals for professional development, fee support for engagement in post-graduate courses, or participation in the overseas study programme. Any success in linking rewards to performance, of course, depends on the clarity of the performance expectations and the skills of those evaluating performance.

190. The teaching profession in Korea could also benefit from its further differentiation not only to respond to the new needs of schools but also to provide a greater variety of opportunities for promotion. The only existing diversification in roles, administrative positions, leads the teacher to leave the classroom. An encouraging step is the current discussion of the head teacher system wherein some teachers would co-ordinate classroom instruction of a group of teachers in the school and provide school-based in-service training. This idea has many merits and ought to be pursued, despite sectoral opposition. This policy could also go further to create roles such as mentor/coach for beginning teachers, co-ordinator of professional development activities, or student counsellor. This could benefit beginning teachers whose teaching load could be adapted to their need for mentoring and support.

191. The prominent weight of allowances in teachers' remuneration also raises concerns in particular because their value is not taken into account in the future amount of pension benefits. Addressing this problem is difficult as its scope goes beyond the teaching profession but it should be borne in mind that this reality greatly influences the reasons why teachers wish to stay in the profession until retirement age and it reduces the attractiveness of the profession.

192. In addition, we consider there are a set of measures that need to be in place to both provide incentives to teachers to focus on their teaching effectiveness and also protect students from poor performing teachers. These measures could include:

- a probationary period for new teachers. This can be structured to ensure new teachers receive the advice and guidance they need, and also provide a means to exit those teachers who are not suited to the role;
- a requirement that teachers renew their teacher certificates after a period of time, such as every five years. The basis for renewal could be as simple as an attestation from the employing school that the teacher was continuing to fully meet the required standards of performance; and
- fair but speedy mechanisms to address poor performance. Teachers in this situation should have an opportunity to remedy any deficiencies but, if improvements do not occur, steps should exist to move these teachers either out of the school system or into non-teaching roles.

193. As regards teacher evaluation, we believe certain principles should be followed. First, evaluation should be carried out in a context of strategic school development. Evaluation should not focus exclusively on individual teachers but have the school as a whole at the centre. In addition, it should be perceived as a means to improve rather than to punish.

194. Furthermore, the evaluation process should involve different stages. It should start from a reflection by the individual being assessed (self-evaluation), be followed by an external evaluation leading to a developmental plan for professional improvement together with the necessary resources. A useful complement to be encouraged is peer evaluation, an informal and low cost feedback strategy. In this context, the well-established concept of *open class* is particularly useful. The latter should be supported; more systematically implemented; focused on the identification of innovative practices with strategies for dissemination to wider audiences; and not provided as an opportunity for promotion.

195. Another key element is a more systematic, coherent and consequential supervision of teachers' work. To achieve this objective, it is crucial that school leaders have the resources to support their teachers and a specific training for evaluating teachers and responding to their developmental needs. In particular, it is imperative that the evaluation of teachers be linked to the professional development activities they undertake. Finally, another essential measure concerns the development of good tools for guiding and informing the evaluation process, making sure criteria as objective as possible are applied in a structured and systematic way to all individuals being evaluated.

11: CONCLUDING REMARKS

196. Korea's educational achievements over the last generation have been truly remarkable. The quantitative expansion of education provision has dramatically increased the opportunities for citizens to avail of education. In a country where education is highly valued, these opportunities have been grasped with participation in secondary education more than trebling over a thirty year period, and participation in higher education zooming by a multiple of seventeen. Korean pupils have performed extremely well in international tests such as PISA. Schools have benefited from heavy investment in information and

communication technologies as Korea seeks to harness these to new modes of teaching and learning. Education is an issue of great public interest in Korea, and the Ministry of Education and Human Resources Development enjoys high status in government. Korean people are prepared to invest significant private resources to secure educational benefits. Such factors highlight the fact that Korea can draw confidence from the achievements of its recent past as it plans to meet the educational challenges of the new century.

197. In this context, Korean governments have been alert since the mid nineties to the desirability of a changed direction in the nature and quality of its education system. Arising from their analysis of the qualities required of Korean citizens in what is seen as a major era of civilisational change that is opening up, the government declared that “the present system of education is not only unable to prepare our society for the future, but is incapable of providing any solution to the problems besetting Korean education today” (PCER, 1996, p.15). Through a dramatic shift in educational policy, the government seeks to release children who it says “are trapped in the so-called examination hell” (Ibid., p.11). It seeks to develop an education system which is learner-centred and fosters imagination, creativity, divergent thinking, risk-taking, moral sensitivity, co-operation, and develops a holistic balance in personality. The government has set its sights on establishing an “edutopia” – a society of open and lifelong education to allow each and every individual equal and easy access to education at any time and place” (Ibid., p.16).

198. The successful implementation of such a change agenda is a daunting task facing Korean society, and is one that is not quickly achieved. Despite the many educational achievements of the past, one of the disappointing observations borne in upon the review body was the disenchantment and lack of enjoyment reported by senior school pupils and past pupils of their educational experience. If lifelong education is to take hold and the provision of qualitative education is to become a reality for all citizens, then many changes are required in the content, pedagogy and assessment of school programmes. The culture of schools needs to be reformed into communities of learning in which the joy of learning and the richness of human relationships are emphasised.

199. The teaching force is, accordingly, of central importance in helping to actualise the new vision for education. The government has recognised this through its “Comprehensive Measures to Develop the Teaching Profession,” published in 2001. A high quality, well educated and trained teaching force is a *sine qua non* for the achievement of reform. Korea does not face problems in the recruitment of suitable candidates to the teaching career. Neither does it have significant difficulties in retaining teachers within the profession. While teachers consider that their status has slipped in the fast changing socio-economic circumstances of contemporary society, there is still high public regard and respect for teachers who work diligently and conscientiously. However, many teachers encounter contradictory pressures in that the form of education sought by the Ministry is different from the over-zealous concern of many parents for examination success, regardless of the educational process through which it is attained. More sustained efforts are required to better inform the public of the values in national policy and the long-term benefits for young people of the education reforms.

200. As regards future policy on the teaching career, the main concentration needs to be on improvements in teacher education and in the career structure and working conditions of teachers. The emphasis needs to be more on “the development” of effective teachers, rather than on “attracting” and “retaining” effective teachers. Initial teacher education, particularly for secondary teaching, needs to be re-conceptualised and re-structured. The quality of much continuing professional development of teachers, throughout their careers, is in need of many reforms. The training and mode of recruitment of school leaders should be changed, and the energy and enthusiasm of younger staff should be drawn upon. It is recognised internationally that the quality of school leaders is of the utmost importance in helping to change the culture of schools.

201. Many committed teachers whom the review team met, felt that their professional energies were being drained by their conditions of work and the multiplicity of tasks they were called upon to perform. There is a need for clearer definition and specification of the teachers' "standard job tasks". Many teachers depend more on extra allowances than on set salaries, but the allowances do not qualify for pension recognition. Most teachers spend up to forty hours per week in school. It is not clear that this is the most beneficial way to organise teachers' time, or to sustain their enthusiasm for their teaching tasks. The new curricular policies encourage self-directed learning and individual-paced learning. However, pupil teacher ratios continue to be very high by OECD standards and seriously inhibit teachers engaging in individual pupil guidance and small group work. It is also the case that there is a need for a more sophisticated mode of dialogue between the Ministry and the teacher representatives to resolve issues affecting teachers' salaries and conditions of work.

202. Building on past achievements and supported by a dynamic public interest and a clear sense of direction, Korea is well positioned to realise many of its ambitious educational goals in the years ahead. It is the hope of the review team that its reflections on the teaching career, in relation to the Korean education system, and its suggestions for future policy on the teaching career will be helpful to the authorities and the teaching profession in Korea.

REFERENCES

- KIM, EE-GYEONG and YOU-KYUNG HAN** (2003), *Attracting, Developing and Retaining Effective Teachers*, OECD, *Background Report for Korea*, Korean Educational Development Institute, Seoul (available from www.oecd.org/edu/teacherpolicy).
- KIM, YONG-JU** (2000), *Analysis of the opinions of the secondary school teachers on the in-service training of teachers*, Secondary School Education Research, Vol. 12, pp. 130-155.
- MOE** (2001), *The Comprehensive Plan to Develop the Teaching Profession*, Seoul.
- MOEHRD** (2001), *The Comprehensive Measures to Develop the Teaching Profession*, Seoul.
- MOEHRD** (2003), Ministry of Education and Human Resources Development, Republic of Korea, *Education in Korea 2002-2003*, Seoul.
- NO, JONG-HI** (1998), *Measures to Improve the Teacher Training System*, Educational Research, Vol. 14, Hanyang University, pp.37-50.
- OECD** (1998), *Reviews of National Policies for Education: Korea*, Paris.
- OECD** (2001a), *Knowledge and Skills for Life: First Results from PISA 2000*, Paris (available from www.pisa.oecd.org)
- OECD** (2001b), *Education at a Glance, OECD Indicators 2001*, Paris.
- OECD** (2002a), *Attracting, Developing and Retaining Effective Teachers: Design and Implementation Plan for the Activity*, Paris (available from www.oecd.org/edu/teacherpolicy).
- OECD** (2002b), *Education at a Glance: OECD Indicators 2002*, Paris.
- OECD** (2003), *Education at a Glance: OECD Indicators 2003*, Paris (see www.oecd.org/edu/eag2003).
- OECD** (2004), *Completing the Foundation for Lifelong Learning: An OECD Survey of Upper Secondary Schools*, Paris (see www.oecd.org/edu/isuss).
- PARK, Young Sook** (2001), *New Trend in the Policy for Elevating Professionalism of the Korean Teacher*, paper presented at the International Forum on Education Reforms in the Asia-Pacific Region: 'Globalisation, Localisation, and Individualisation for the Future', hosted by the Hong-Kong Institute of Education, Hong-Kong.
- PCER** (1996), The Presidential Commission on Education Reform, *Education Reform for New Education System: To Meet the Challenges of Information and Globalization Era*, PCER Report, Seoul.

APPENDIX 1: THE OECD REVIEW TEAM

Paulo Santiago
Education and Training Policy Division
Directorate for Education
OECD

John Coolahan (Rapporteur)
Education Department
National University of Ireland
Maynooth
Ireland

Akira Ninomiya
Faculty of Education
University of Hiroshima
Japan

Rowena Phair
School Labour Market Policy Unit
Ministry of Education
New Zealand

APPENDIX 2: NATIONAL CO-ORDINATOR, NATIONAL ADVISORY COMMITTEE, AND AUTHORS OF THE COUNTRY BACKGROUND REPORT

National Co-ordinator for Korea

Ms. Ee-gyeong Kim, Research Fellow, Korean Educational Development Institute (KEDI)

National Advisory Committee

Mr. Chong-jae LEE (Chairman), President, KEDI;

Ms. Young-sook PARK, Team Director of Teacher Policy, KEDI;

Mr. Chung-wha SEO, Professor, Hongik University;

Mr. Young-kook YOO, Director of Secondary Education Division, Seoul Metropolitan Office of Education;

Mr. Young-man LEE, Director-General of Teacher Policy, Ministry of Education and Human Resources Development (MOEHRD);

Mr. Yong-whan LEE, Teacher, Surak Elementary School;

Mr. Bong-kun CHUNG, Director of Human Resources Development Bureau, MOEHRD;

Ms. Yu-kyung HAN, Team Director of High School Studies, KEDI;

Mr. Jae-gap HAN, Director of Policy Negotiation Bureau, Korean Federation of Teachers' Association (KFTA).

Authors of the Country Background Report

Ms. Ee-gyeong Kim, Research Fellow, KEDI;

Ms. You-kyung Han, Research Fellow, KEDI.

APPENDIX 3: PROGRAMME OF THE REVIEW VISIT

Sunday 20 April

18:00 Ee-gyeong Kim, National Co-ordinator; Suk-hoon Han (Lecturer, Kyunghee University) and Eun-jin Lee (Researcher, KEDI), members of the team assisting during visit.

Monday 21 April

09:00 YoungWon Elementary School, Seoul.

Tour of school including classroom visits, meeting with Principal and Vice-Principal, roundtable with teachers, lunch with school management and teachers.

14:00 National Advisory Committee, CBR authors, National Co-ordinator and Ms. Young-sook Shin (Deputy Director of Teacher Policy, MOEHRD).

16:00 Parents' organisations: Parent Solidarity for the Human Education and National Association of Parents for Truth (*Cham*) Education.

17:00 Education Journalists: The Korea Education Weekly and Education Broadcasting System.

19:00 Welcome Dinner hosted by KEDI's President.

Tuesday 22 April

09:00 Ministry of Education and Human Resources Development, Senior officials: Teacher Policy Division; Teacher Education and Development Division; Teacher Welfare Policy Division.

10:45 Ministry of Education and Human Resources Development, Senior officials: School Policy Division and School Policy Office; Curriculum Policy Division; Education Assessment and Evaluation Division; Teacher Policy Division.

12:00 Lunch with senior officials from MOEHRD.

14:00 Seoul Metropolitan Office of Education, Senior officials.

16:30 Hanyang University, Teacher Education institution for secondary teachers
College of Education – Dean, Professors, Group of students.

Wednesday 23 April

09:00 ChoongAng Middle School, Seoul

Tour of school including visit to classes, discussion with heads of school, representative of Governing Board, and teachers.

11:30 Lunch with teachers and heads of school at ChoongAng Middle School.

13:00 Hyundai High School (academic high school), Seoul

Tour of school, discussion with school management, teachers, and senior students.

16:30 GyeongIn National University of Education, Teacher education institution for primary teachers, Incheon.

Discussion with President of University, Professors, and students.

Thursday 24 April

09:30 Seminar with educational researchers: Nam-gi Park (Professor, Gwangju National University of Education), Je-sang Jeon (Professor, GyeongJu University), Sook Hur (Professor, GyeongIn National University of Education), Jeon Ko (Team Director of Educational Administration, KEDI), Young-sook Park (Team Director of Teacher Policy, KEDI), Gyu-ho Hwang (Professor, Ewha Woman's University).

12:30 Lunch with educational researchers.

- 14:00 Korean Federation of Teachers' Association (KFTA).
16:30 Korea Teachers and Workers Union (KTWU).

Friday 25 April

- 11:00 Won Wil Elementary School, Kyunggi Province
Tour of school including visit to classes, discussion with heads of school, representative of Provincial Office, and teachers.
13:00 Lunch with teachers and school management.
14:00 Kyunggi Province Office of Education, Senior officers.

Saturday 26 April

- 09:30 Review team meetings.
16:00 Korea Institute of Curriculum and Evaluation (KICE).
17:00 Review team meetings.

Monday 28 April

- 09:30 Donggoo Girls' Commercial High School, Seoul.
Tour of school including visit to classes, discussion with heads of school, teachers, and senior students.
12:00 Lunch with teachers and school management.
14:30 Korea National University of Education, Chungbuk Province
Discussion with President of University, Professors, and students.
18:00 Dinner hosted by Vice-Minister of MOEHRD, Seoul.

Tuesday 29 April

- 09:30 Review team meetings.
13:30 National Advisory Committee, CBR authors, National Co-ordinator and Ms. Young-sook Shin (Deputy Director of Teacher Policy, MOEHRD), Mr. Dae-yul Lee (Director of Teacher Policy, MOEHRD), Mr. Heung-ju Kim (Director General of Planning Bureau, KEDI), Mr. Mann-gil Han (Director-General, Research Center for Education Policy, KEDI), Ms. Jae-Eun Chae (Assistant Director, International Cooperation Division, MOEHRD).
Initial impressions by review team and feedback by Korean authorities.
15:30 Farewell drink.
16:00 Visit conclusion.

APPENDIX 4: COMPARATIVE INDICATORS ON TEACHERS

	Korea	OECD country mean	Korea's rank ¹
SCHOOL SYSTEM EXPENDITURE			
Expenditure – total (2000)			
Expenditure on all educational institutions as a % of GDP	7.1	5.5	1/29
Expenditure on schools and post-secondary non-tertiary educ. institutions as a % of GDP	4.0	3.6	9/29
Total education expenditure from public sources (%)	59.2	88.4	27/27
Expenditure per student (2000)²			
Primary (US\$)	3 155	4 381	21/26
Lower secondary (US\$)	3 655	5 575	16/20
Upper Secondary (US\$)	4 440	6 063	16/21
All secondary (US\$)	4 069	5 957	21/26
Current expenditure – composition (2000)³			
Compensation of teachers (%)	75.0	63.0	4/17
Compensation of other staff (%)	8.5	14.9	=15/17
Compensation of all staff (%)	83.5	80.3	9/27
Non-staff expenditure (%)	16.5	19.7	19/27
SCHOOL-AGE POPULATION			
Expected changes in the school-age population by 2010 relative to 2000 (2000=100), Source: OECD (2001b)			
Ages 5-14	100	91	=5/30
Ages 15-19	90	98	22/30
SCHOOL STAFF NUMBERS			
Ratio of students to teaching staff (2001)⁴			
Primary	32.1	17.0	1/29
Lower Secondary	21.0	14.5	2/22
Upper Secondary	19.3	13.8	2/23
All Secondary	20.1	13.9	2/26
Average class size (public institutions, 2001)⁵			
Primary	36.3	22.0	1/23
Lower secondary	37.9	23.8	1/22
Staffing levels (2001)			
Classroom teachers, academic staff and other teachers, primary and secondary schools, per 1000 students, in full-time equivalents	40.1	71.4	27/29
Distribution of school staff by personnel category (upper sec., 2001)^{6, 7}			
Source: OECD (2004)			
Management personnel (%)	3	5	=11/14
Teachers (%)	82	73	=1/14
Teacher aides (%)	2	2	=3/11
Professional support personnel (%)	1	4	=13/14
Other support personnel (%)	12	17	11/14

(Continued on next page)

(continued)

CHARACTERISTICS OF THE TEACHER WORKFORCE

Age distribution of teachers (percentage aged 50 and over, 2001)⁸			
Primary	15.1	25.4	17/18
Lower secondary	8.7	28.9	16/16
Upper secondary	11.7	31.6	17/17
Gender distribution of teachers (% of females, 2001)⁸			
Primary	71.6	78.6	19/25
Lower secondary	61.0	64.8	15/22
Upper secondary	32.0	51.4	23/24
Part-time teachers as a percentage of total teachers (upper sec., 2001)⁶			
0.6	24.6	12/12	
Temporary teachers (upper secondary, 2001)⁶			
Full-time temporary teachers as a % of all FT teachers	3.0	12.4	12/12
Part-time temporary teachers as a % of all PT teachers	38.8	40.7	5/12
Teachers who are not fully qualified (upper secondary, 2001)⁶			
Full-time teachers who are not fully qualified as a % of FT teachers	Negligible	14.3	--
Part-time teachers who are not fully qualified as a % of PT teachers	Negligible	31.3	--
GRADUATES FROM INITIAL TEACHER EDUCATION			
Tertiary graduates with qualifications in education (2001)⁹			
Tertiary-type A and advanced research programmes (%)	5.2	13.1	24/25
Tertiary-type B programmes (%)	9.0	13.0	10/17
TEACHER EMPLOYMENT			
School responsibility for the hiring of teachers (upper secondary, 2001)⁶			
% students attending schools which are responsible for hiring teachers	52.6	67.4	10/13
TEACHER VACANCIES and ABSENTEEISM			
Teaching vacancies (upper secondary, 2001)⁶			
% students attending schools where there are no vacancies to be filled	1.2	6.3	13/13
% of FTE teaching posts needed to be filled ¹⁰	2.0	12.3	13/13
Perceived difficulty in hiring fully qualified teachers (upper sec., 2001)^{6, 11}			
Language of instruction	7.6	12.7	11/14
Mathematics	8.2	33.4	12/14
Foreign languages	37.0	31.7	5/14
Social studies	11.4	7.8	4/14
Sciences	6.6	30.4	11/14
Computer sciences/information technology	30.3	48.7	13/14
Methods used to cover teaching vacancies (upper secondary, 2001)^{6, 12}			
Hire a fully qualified teacher	56.6	90.1	13/13
Hire a teacher with less than a full qualification	1.5	35.3	12/13
Cancel a planned course	3.5	3.4	5/12
Expand the size of some of the classes	4.1	9.3	12/13
Add sections (courses) to other teachers' normal teaching hours	47.6	35.8	4/13
Teacher absenteeism (upper secondary, 2001)⁶			
% of class periods cancelled due to absence of assigned teacher	1.5	3.5	13/14
% of class periods covered by another teacher due to absence	6.5	6.6	5/12
TEACHER WORKLOADS			
Net teaching time, hours per year (2001)¹³			
Primary education	828	792	10/26
Lower secondary education	553	714	25/25
Upper secondary education, general programmes	519	656	23/25

(Continued on next page)

(continued)

STUDENT VIEWS

PISA index of teacher support for 15-year olds (2000)¹⁴, Source: OECD(2002b)	-0.67	0.02	27/27
PISA index of disciplinary climate for 15-year-olds (2000)¹⁵, Source: OECD(2002b)	0.20	0.00	5/27

TEACHER SALARIES

Annual teacher salaries, public schools (with minimum training, 2001)²			
Primary - starting salary (US\$)	25 177	21 982	9/29
Primary - 15 years experience (US\$)	42 845	30 047	4/29
Primary - top of scale (US\$)	68 581	36 455	1/29
Primary - ratio of salary after 15 years experience to GDP per capita	2.69	1.31	1/29
Lower secondary - starting salary (US\$)	25 045	23 283	10/28
Lower secondary - 15 years experience (US\$)	42 713	31 968	4/28
Lower secondary - top of scale (US\$)	68 449	38 787	1/28
Lower sec. - ratio of salary after 15 years experience to GDP per capita	2.69	1.34	1/28
Upper secondary, general - starting salary (US\$)	25 045	24 350	12/28
Upper secondary, general - 15 years experience (US\$)	42 713	34 250	7/28
Upper secondary, general - top of scale (US\$)	68 449	41 344	2/28
Upper secondary, general - ratio of salary after 15 years to GDP per capita	2.69	1.43	1/28
Ratio of salary after 15 years experience to starting salary (2001)			
Primary	1.70	1.37	3/29
Lower secondary	1.71	1.38	3/28
Upper secondary, general programmes	1.71	1.41	3/28
Number of years from starting to top salary (lower secondary, 2001)			
	37	25	3/27
Salary per hour of net contact (teaching) after 15 years experience (2001)²			
Primary (US\$)	52	37	4/26
Lower secondary (US\$)	77	45	=1/25
Upper secondary, general programmes (US\$)	82	52	2/25
Ratio of salary per teaching hour of upper secondary and primary teachers	1.59	1.38	7/25
Real change in teachers' salaries (between 1996 and 2001) (1996=100)¹⁶			
Primary – starting salary / minimum training	115	110	=6/22
Primary – salary after 15 years of experience / minimum training	110	109	8/22
Primary – salary at top of scale / minimum training	110	109	=6/22
Lower secondary – starting salary / minimum training	113	110	7/21
Lower secondary – salary after 15 years of experience / minimum training	109	109	8/21
Lower secondary – salary at top of scale / minimum training	110	110	=6/21
Upper secondary – starting salary / minimum training	113	107	3/21
Upper secondary – salary after 15 years of experience / minimum training	109	106	6/21
Upper secondary – salary at top of scale / minimum training	110	107	4/21
Comparison of average secondary teachers' salaries with other public sector employees (1999)¹⁷			
Computer operator	▲	■10 ▼7 ▽7 ▲1 △0	
Social worker	▽	■6 ▼11 ▽3 ▲1 △2	
University lecturer	▲	■2 ▼0 ▽0 ▲6 △16	
Civil engineer	△	■4 ▼2 ▽0 ▲4 △15	
Head teacher / Principal	△	■1 ▼0 ▽0 ▲7 △16	

(Continued on next page)

(continued)

Increases to base salary for teachers in public schools (2001)¹⁸

Holding a higher than the minimum qualification required to enter teaching	∅	15/29
Reaching high scores in the qualification examination	∅	3/29
Holding an educational qualification in multiple subjects	∅	3/29
Successful completion of professional development activities	∅	9/29
Management responsibilities in addition to teaching duties	√	22/29
Holding a higher than minimum level of teacher certification or training obtained during professional life	∅	13/29
Outstanding performance in teaching	∅	11/29
Teaching courses in a particular field (e.g., mathematics or science)	∅	6/29
Teaching students with special educational needs (in regular schools)	√	14/29
Teaching more classes or hours than required by full-time contract	√	21/29
Special activities (e.g., sports, drama and homework clubs, Summer school)	∅	15/29
Special tasks (e.g., training student teachers, guidance and counselling)	∅	16/29
Teaching in a disadvantaged, remote or high cost area (location allowance)	√	18/29
Family status (e.g., married, number of children)	√	12/29
Age (independent of years of experience)	∅	6/29
Other	∅	12/29

TEACHER PROFESSIONAL DEVELOPMENT

School provision of professional development (upper secondary, 2001)^{6,19}

School has a separate budget for teacher professional development (%)	29	61	11/14
School provides time for teacher professional development (%)	59	78	12/14
School organises staff development activities (%)	40	79	14/14

Teacher participation in professional development (upper sec., 2001)^{6,20}

<i>All types of professional development</i>			
ICT-related professional development activities (%)	35.3	31.8	5/14
Other than ICT-related professional development activities (%)	32.8	48.1	12/14
<i>Course-type professional development</i>			
Courses on subject matter, methodology and other education-related topics	98.5	94.3	5/14
Conferences where teachers and/or researchers discuss educational problems	83.1	68.8	4/14
A degree programme (e.g., Master's programme, Ph.D.)	92.9	67.9	2/14
<i>Mentoring and peer observation types of professional development</i>			
Observational visits to other schools (%)	87.8	53.4	1/14
Regularly scheduled collaboration among teachers on instruction issues (%)	88.3	81.8	6/14
Mentoring or peer observation and coaching as part of a formal arrangement (%)	84.2	53.9	1/14
Collaborative research and/or development on a topic related to education (%)	69.9	72.9	11/14
Network of teachers (organised by an outside agency or over the Internet (%)	72.8	54.7	3/14
<i>Other types of professional development</i>			
Visited companies/employers (%)	39.0	69.5	14/14

Teacher participation in professional development (teachers of 15-year olds, 2000),

Source: PISA Database, 2001

% teaching staff who attended a programme of prof. dev. in the last 3 months ²¹	26	42	=26/27
--	----	----	--------

Sources: All data are from OECD (2003), unless indicated otherwise in the table.

Notes:

1. “Korea’s rank” indicates the position of Korea when countries are ranked in descending order from the highest to lowest value on the indicator concerned. For example, on the first indicator “Expenditure on all educational institutions as a % of GDP”, the rank “1/29” indicates that Korea recorded the highest value of the 29 OECD countries that reported relevant data. The symbol “=” means that at least one other country has the same rank.
2. Expressed in equivalent US\$ converted using purchasing power parities.
3. Expenditure on goods and services consumed within the current year which needs to be made recurrently to sustain the production of educational services. Refers to current expenditure on schools and post-secondary non-tertiary educational institutions. The individual percentages do not always sum to the totals due to rounding.
4. In public and private institutions; calculations based on full-time equivalents. “Teaching staff” refers to professional personnel directly involved in teaching students.
5. Calculated by dividing the number of students enrolled by the number of classes (excluding special needs programmes and teaching in sub-groups outside the regular classroom setting).
6. As reported by school principals. The figure is computed weighting the response for each school sampled by the number of students enrolled in that school.
7. *Management personnel* includes professional personnel who are responsible for school management and administration, i.e., principals, assistant principals, headmasters, and assistant headmasters. *Teacher aides* includes non-professional personnel or students who support teachers in providing instruction to students. *Professional support personnel* includes professional staff who provide student services, e.g., guidance counselors, librarians and psychologists. *Other support personnel* includes maintenance and operations personnel, e.g., receptionists, secretaries, plumbers, drivers, cleaning personnel, etc.
8. In public and private institutions, based on head counts.
9. Percentage of tertiary graduates who graduated with qualifications in education. “Tertiary-type A” programmes generally involve at least three years full-time study, and typically last four or more years. “Tertiary-type B” programmes are generally shorter, less theory-based, and are designed for direct entry to the labour market.
10. Ratio of vacant posts to the total number of FTE teachers at the beginning of the 2001-02 school year.
11. Percentage of students attending schools where principal reported difficulty.
12. Percentage of students attending schools that use the listed methods to cover teaching vacancies.
13. Calculated on the basis of the annual number of weeks of instruction multiplied by the minimum/maximum number of periods that a teacher is supposed to spend teaching a class or a group, multiplied by the length of the period in minutes and divided by 60. Excludes breaks between lessons and days when schools are closed for holidays.
14. PISA index based on the percentage of 15-year olds who report that in most or every test language lesson, the teacher: (i) shows an interest in every student’s learning; (ii) gives students an opportunity to express opinions; (iii) helps students with their work; (iv) continues teaching until the students understand; (v) does a lot to help students; (vi) helps students with their learning; and (vii) checks students’ homework.
A positive value on the index indicates that the students responded more favourably than all students on average, in OECD countries; a negative value indicates that they responded less favourably on average.
15. PISA index based on the percentage of 15-year olds who report that in most or every test language lesson: (i) the teacher has to wait a long time for students to quieten down; (ii) students cannot work well; (iii) students don’t listen to what the teacher says; (iv) students don’t start working for a long time after the lesson begins; (v) there is noise and disorder; and (vi) at the start of class, more than five minutes are spent doing nothing.
A positive value on the index indicates that the students responded more favourably than all students on average, in OECD countries; a negative value indicates that they responded less favourably on average.
16. Index of change between 1996 and 2001 in teachers’ salaries converting 1996 salaries to 2001 price levels using GDP deflators. The index is calculated as teacher salary 2001 in national currency * 100 / Teacher salary 1996 in national currency * GDP deflator 2001.
17. The symbols indicate:
 - Between -10 and +10 % of a secondary teacher’s salary
 - ▼ More than 10 but less than 30% lower than a secondary teacher’s salary
 - ▽ More than 30 % lower than a secondary teacher’s salary

▲ More than 10 but less than 30% higher than a secondary teacher's salary

△ More than 30 % higher than a secondary teacher's salary

The information in the "OECD country mean" column indicates the number of countries in each category. For example, in the "Computer operator" row, "■10" means that in 10 countries the salary of a computer operator is between -10 and +10 % of a secondary teacher's salary.

18. OECD (2003) gives information about the authority responsible for making the decision regarding the increase. A "√" indicates that the specific system exists to increase the base salary of teachers while "∅" indicates that such system does not exist. The information in the column "OECD country mean" provides the number of countries in which the specific mechanism exists out of the 29 countries for which data are available.
19. Percentage of students whose school principal reported school support for teachers' professional development.
20. Percentage of students attending schools where principals reported that at least one teacher participated in professional development activities during the 2000/2001 school year.
21. In PISA 2000 questionnaire, principals were asked what percentage of teaching staff in their school has attended a programme of professional development in the last three months. The average country figure is computed weighting each school figure by the number of students enrolled in that school.