

# **O** *vercoming Failure at School*



# OVERCOMING FAILURE AT SCHOOL

## **ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT**

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié en français sous le titre :  
VENIR A BOUT DE L'ÉCHEC SCOLAIRE

© OECD 1998

Permission to reproduce a portion of this work for non-commercial purposes or classroom use should be obtained through the Centre français d'exploitation du droit de copie (CFC), 20, rue des Grands-Augustins, 75006 Paris, France, Tel. (33-1) 44 07 47 70, Fax (33-1) 46 34 67 19, for every country except the United States. In the United States permission should be obtained through the Copyright Clearance Center, Customer Service, (508)750-8400, 222 Rosewood Drive, Danvers, MA 01923 USA, or CCC Online: <http://www.copyright.com/>. All other applications for permission to reproduce or translate all or part of this book should be made to OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

## FOREWORD

This study is the outcome of an activity on “Combating Failure at School”, launched by the OECD in 1994. The final report – which drew together a number of “interim” outcomes as well as previous OECD work on the topic – was presented to the Education Committee in November 1996. The document was revised, taking into account comments and advice from the Education Committee, as well as subsequent information provided by Member countries. It has also been complemented with new statistical data from the Third International Mathematics and Science Study (TIMSS) and updated data from the International Adult Literacy Survey (IALS).

The analysis which follows is based on: national contributions to and exchanges at three country-hosted seminars; studies commissioned from experts on different aspects of educational failure and a clarifying report, which served as the main reference document during the course of the activity. The clarifying report was prepared by John Lowe, consultant and rapporteur for the three country-hosted seminars. The latter were held in Brussels (May 1995), London (November 1995) and Alexandroupolis (September-October 1996) and were hosted, respectively, by the French Community of Belgium; the Department for Education and Employment of the United Kingdom and the University of London Institute of Education; the Greek Ministry of Education and the Democritus University of Thrace.

The meeting in Brussels focused on the “failing student”. Four topics commanded particular attention: how a “culture of failure” becomes embedded in a system; assessment procedures which lead to high rates of repeating; increased risk of failure at transition points across levels; and the need to find ways to strengthen parental involvement in schools. The London seminar centred on the main characteristics of a “failing school” and the factors most influential in securing a school’s recovery. A comprehensive overview was provided about the current policies for improving school effectiveness in the

United Kingdom, which were compared to policies in other Member countries aiming to improve the system as a whole. Finally, the aim of the Greek conference was to analyse the impact of innovative pedagogical and teacher training practices on policies for improving the success of all students. A special feature of the seminar was a review of experiences in Southern Europe, as well as in some Eastern and Central European non-OECD Member countries.

Three types of expert papers were commissioned:

- some relate to specific issues or policy areas;
- others analyse national and international quantitative data; and
- a series of case studies reflect policy experience in different OECD Member countries.

The consultants responsible for the first set of papers were: Philip Gammage (University of Nottingham), Monique Wach (Université de Bourgogne), and Aegli Zafeirakou (Democritus University of Thrace). Those in charge of the statistical analysis were: Aletta Grisay and Dominique Lafontaine (University of Liège), David Neice (Statistics Canada), Heiko Jungklaus (International Association for the Evaluation of Educational Achievement) and Edwin Leuven (OECD Secretariat).

Five country studies were commissioned for Belgium, Canada, Japan, Spain and the United Kingdom. The authors of the case studies, an edited version of which has been included in this publication, were: Michael Barber (Special Adviser to the Secretary of State for Education and Employment, United Kingdom, and formerly University of London Institute of Education); Marcel Crahay (Universities of Liège and Geneva); Alfredo Fierro (University of Malaga, and formerly Director of Cabinet, Secretary of State of Education, Spain); Michael Fullan (University of Toronto); and Shinichi Yamamoto (University of Tsukuba). Simon James from the Department of Education and Employment in the United

Kingdom assisted in editing the case studies, as well as in drafting the final report on the activity.

The report was prepared by Karen Kovacs from the Secretariat in collaboration with Abrar Hasan, Head of the Education and Training Division. It draws on the knowledge and expertise of all those who participated in the activity, which was supported and guided by a group of country representatives. Its main findings were presented in two dissemination conferences. The first one was held in Toronto and was hosted by the Canadian Education Association with the support of the Council of

Ministers of Education, Canada (Toronto, September 1997). It focused on experience in the North American region and on strategies for moving from policy to practice. The second one took place in Christchurch (February 1998) and was organised jointly by the New Zealand Ministry of Education and the New Zealand Education Review Office. It centred on innovations for improving both the performance of schools and students in the Asia-Pacific region and other OECD countries. This report is published on the responsibility of the Secretary-General of the OECD.

# TABLE OF CONTENTS

|                                    |   |
|------------------------------------|---|
| <b>Executive summary</b> . . . . . | 7 |
|------------------------------------|---|

## *Part I*

### **PATTERNS AND POLICY RESPONSES**

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| <b>Chapter I. An old problem in a new context</b> . . . . .               | 11 |
| The problem in perspective . . . . .                                      | 11 |
| The problem restated . . . . .                                            | 12 |
| The problem redefined . . . . .                                           | 13 |
| <b>Chapter II. Indicators of failure</b> . . . . .                        | 15 |
| Risk or manifestation of failure at school . . . . .                      | 15 |
| Failure manifested in early school leaving . . . . .                      | 21 |
| Consequences of failure for adult life and employment prospects . . . . . | 26 |
| Statistical annex: Data for the figures . . . . .                         | 31 |
| <b>Chapter III. Policies for addressing failure</b> . . . . .             | 43 |
| Systemic reform . . . . .                                                 | 43 |
| School-level intervention . . . . .                                       | 45 |
| Programme assistance . . . . .                                            | 47 |
| Policy implications: general considerations . . . . .                     | 47 |
| <b>Chapter IV. Main findings and policy challenges</b> . . . . .          | 55 |
| Lessons from indicators of failure . . . . .                              | 55 |
| Lessons from policy practice . . . . .                                    | 56 |
| Main policy challenges . . . . .                                          | 57 |

## *Part II*

### **COUNTRY CASE STUDIES**

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| <b>Belgium: From grade repetition to schooling based on cycles</b> . . . . .    | 63 |
| Grade repetition and school retardation: an international perspective . . . . . | 63 |
| Comparisons between the two communities of Belgium . . . . .                    | 64 |
| Responses to failure at school . . . . .                                        | 67 |
| <b>Canada: Provincial and school-level intervention in Ontario</b> . . . . .    | 69 |
| National and provincial context . . . . .                                       | 69 |
| Student and school failure . . . . .                                            | 69 |
| Reform trends and strategies in Ontario . . . . .                               | 70 |
| Policy implications . . . . .                                                   | 73 |
| <b>Japan: Upper secondary school drop-outs</b> . . . . .                        | 75 |
| Failure at school in Japan . . . . .                                            | 75 |
| Upper secondary school drop-outs . . . . .                                      | 76 |
| Measures to solve the problem . . . . .                                         | 77 |
| Policy implications . . . . .                                                   | 78 |

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| <b>Spain: The need to acknowledge failure</b> .....                               | 81 |
| Educational reform .....                                                          | 81 |
| The background to failure .....                                                   | 81 |
| Indicators and extent of failure .....                                            | 82 |
| Social perceptions of failure .....                                               | 83 |
| Policy measures to cope with failure .....                                        | 84 |
| Recent policies and trends .....                                                  | 85 |
| <b>United Kingdom, Australia and New Zealand: an institutional approach</b> ..... | 87 |
| Analytical framework .....                                                        | 87 |
| National policies and practices .....                                             | 89 |
| Policy implications .....                                                         | 93 |
| Notes .....                                                                       | 95 |
| Bibliography .....                                                                | 96 |

## EXECUTIVE SUMMARY

The aim of this report is to develop a deeper understanding of the nature of “failure at school” in OECD countries. To this end, Part I restates the problem as it confronts policy-makers today, examines some of its manifestations, discusses the main approaches taken to address it, and identifies prime targets for policy action. Part II comprises five case studies which illustrate different definitions of, and policy approaches to, the problem of failure at school. They provide the background for the analysis undertaken.

Chapter 1 analyses this multi-faceted problem from three perspectives – psychological, social and institutional – and proposes a working definition for developing policies to address failure. Quantitative evidence on different manifestations of failure is analysed in Chapter II. Measures to address these manifestations are discussed and suggestions are made for further development of national and international indicators of failure. Chapter III compares various forms of intervention aimed at improving student achievement in OECD Member countries. Drawing on selected national experiences it reviews system and school level approaches, as well as different kinds of programme assistance, and puts forward general considerations to guide policy development. Finally, Chapter IV summarises the lessons from indicators of failure and policy practice considered in this study, and concludes by presenting the main challenges for policy-makers.

The evidence on academic achievement across OECD suggests strongly that, for the foreseeable future, there will be continued concern about raising the performance standards of all students in the context of an increasingly globalised world economy. Finding effective means for combating failure or promoting success at school will therefore remain a priority for policy-makers at the turn of the century. Six key messages emerge from the present study in this request:

- Countries need to confront “failure” by identifying the extent and form that this problem takes in their own national context. The evidence reflects a

wide gap between highest and lowest achievers of the same age, equivalent to up to four years of schooling. It also shows that a significant number of young people with secondary and even post-secondary qualifications seem to lack the knowledge and skills for successful integration into the world of work.

- Clear leadership at the national level is required to mobilise public opinion around a strategy to combat failure or promote success, and to ensure an ongoing feedback between the system and school levels.
- Overcoming failure requires a long term and co-ordinated effort that matches the complexity of the problem and is supported by a broad range of actors within the school, the community and the home environment.
- Experience shows the importance of addressing the different needs of students who fall behind at school or leave without having acquired the necessary qualifications to take up work. Key measures in this respect are individualised instruction and aid, an accurate assessment of student strengths and weaknesses, a more flexible curriculum, smoother pathways and transitions across levels, and improved educational and career guidance. Furthermore, a consensus is developing on the value of early action in order to prevent students at risk from failing in the first place.
- In spite of the differences among countries, learning from the experience of others is crucial for successful policy development. Disseminating best practice requires effective monitoring and evaluation of “what works”. But very few of the policies to overcome failure have been systematically monitored or fully evaluated.
- Indicators of failure are scanty, in part because the problem is defined differently in different countries. Thus, an effort must be made to develop a comparative knowledge base on educational failure and success, both at the national and international levels.

*Part One*

## **PATTERNS AND POLICY RESPONSES**

## AN OLD PROBLEM IN A NEW CONTEXT

The intention here is to place the problem of “failure at school” in a historical perspective, restate it as it confronts policy-makers today and propose a definition which is most appropriate for the development of effective policies within a lifelong learning perspective.

### THE PROBLEM IN PERSPECTIVE

Educational “failure” or, as it is often called today “under-achievement” or “low achievement”, is a phenomenon as old as the idea of schooling. It has been recognised by teachers ever since the general establishment of compulsory education in industrialised countries in the nineteenth century and applies to those pupils whose academic performance is significantly below the average for their age group. It may occur from the earliest years of primary schooling or at a later stage, particularly when the transition to the lower secondary level takes place. But it is usually only formally registered when young people leave school at the statutory leaving age without an employable qualification or the necessary knowledge and skills to take up work, and with no interest in further studies.

Until the Second World War most societies took failure at school more or less for granted. There existed, ineluctably, successful and unsuccessful pupils just as there were good and bad schools. Streaming of, or within classes at the primary level and selection into post-primary or secondary schools were standard practice in the majority of countries. Education played *de facto* a screening role for placement in work and society. If a few innovative schools and some inspired teachers made exceptional efforts to help all their pupils reach an appropriate standard, schools in general were not expected to cater equally for all children, especially beyond the primary level, or to cater for children with widely differing abilities and heterogeneous social backgrounds. Students were required to adjust without question to the academic demands and values that were imposed. If they could not cope, they were usually left to trail behind. Except

in progressive or experimental schools, the curriculum was designed, first and foremost, for the transmission of facts and the mastery of intellectual skills. External examinations as well as teacher and school tests were used mainly for summative purposes. Individual achievement was broadly correlated with social background.

After the Second World War, however, the objective of broadening access to education and raising the overall level of knowledge and skills in the population emerged increasingly as a political and social priority. Countries seeking to create more egalitarian societies wanted to ensure an “equal start” in life for all young people. In the 1960s – when educational policy-making, planning and implementation became more sophisticated – “equality of opportunity” was confirmed as the primary aim of education policy in OECD countries. The intention was to enable each individual to gain the fullest possible benefit from his or her initial period of schooling so as to be able to cope with the demands of adult life. Education was seen as the key to upward social mobility for individuals and economic prosperity for societies.

The hope was that disparities in educational achievement among social groups as well as individual failure would disappear if access to all levels of education was expanded, capital and recurrent expenditures were increased, compensatory programmes were provided for under-achieving students, and the curriculum was made relevant to modern needs. Many countries introduced the comprehensive school in the belief that bringing together all the young people in a given catchment area to one institutional complex would reduce and eventually remove the wide differences in educational achievement, and ensure that no young person would leave school with a sense of failure.

In the 1980s, the combination of structural adjustment and rapid technological change led to a shift in emphasis from equality of opportunity, to raising the overall standards of educational performance as such, and, in certain countries, to striving for

“equality of educational outcomes”. This resulted in a major policy shift in the 1990s, from strategies which attempted to address the needs of disadvantaged groups through compensatory policies, to measures aimed at preventing and overcoming the learning difficulties for all young people, as part of a larger aim to attain higher, required levels of knowledge, skills and competencies.

At the turn of the century, having a well prepared and flexible labour force has become necessary in order for countries to remain competitive in the globalised world economy. Education systems are therefore expected to prepare and motivate all students – from an early age on – for learning over a lifetime. Moreover, they must ensure that all young people – employed or unemployed – are provided with opportunities to retain or upgrade their skills (OECD, 1996a) so that they can keep abreast of the increasingly rapid pace of change in many areas of modern life, not least in the workplace.

Yet despite all the measures educational authorities have undertaken in the last four decades to combat persistent poor performance, dropping out or non-completion of courses, and the development of negative attitudes towards education and training – failure continues to prevail in all OECD countries, although in different forms and to varying degrees. This fact demonstrates that there are neither easy solutions nor quick fixes to the problem.

## THE PROBLEM RESTATED

The renewed emphasis on overcoming failure in many OECD countries reflects a concern about the increasingly damaging consequences of low educational and skills attainment in post-industrial, service and information economies: “more than ever before, failure at school begets social failure, which in turn threatens social integration” (Eurydice, 1994, p. 9). Today, educational failure has become punitive for the individual, in terms of unemployment or low earnings; harmful for society as a whole, in terms of reduced economic competitiveness and social cohesion; and a heavy burden for educational systems, in terms of waste of resources in a context of restraint in government spending.

Recent studies show that while some 15 to 20 per cent of young people in OECD countries leave secondary school without the necessary skills and qualifications to enter into the labour market (OECD, 1994a), one third of the adult population in seven advanced economies performs at levels of

literacy and numeracy which are below those needed for employment (OECD and Statistics Canada, 1995). But even in the 1980s, France estimated that it allocated 30 per cent of its education budget to costs arising from failure at school (due to grade repeaters and drop-outs); and the French community of Belgium estimated its educational expenditure could be cut by around 10 per cent if the practice of grade retention was abolished (see Eurydice, 1994).

Developing successful policies for addressing failure requires an understanding of its multifaceted nature. Failure at school is the product of the interaction of many variables: some are student based (various forms of special educational need, adolescent developmental problems); others relate to factors in the student’s home and community environment (low income, ethnic minority or migrant background); and still others are school based (inappropriate teaching methods, inadequate resources, poor curriculum). Researchers have attempted to provide overarching explanations of educational failure by stressing the “causal effect” of such psychological, socio-cultural or institutional variables; and these three approaches have had an impact on the development of different policy trends. It is worthwhile to look briefly into this relationship.

The first attempts to understand the low educational attainment of some students were framed in psychological terms. There are two main variants of such *psychological explanations*: the genetic and the psycho-affective. The genetic explanation is the longest-standing explanation of failure at school. This relates school achievement to cognitive factors, which it claims are inherited but are also affected by the child’s early environment. The development of IQ tests has stimulated renewed debate in recent years, following various attempts to restate a cause-effect link of inheritance and social behaviour. The psycho-affective approach explains learning difficulties of slow learners in relation to conflicts within the family. Both of these explanations gave rise to separate provision of remedial education.

On the other hand, *socio-cultural explanations* have claimed that the root of educational failure lies in the “cultural disadvantage” of specific social groups. Furthermore, they have argued that since schools do not respond to the special needs of these groups, they reproduce social inequality and, by doing so, schools themselves help to increase the initial “disadvantages” of such pupils. These explanations,

which developed in opposition to the psychological theories, correspondingly gave rise to a policy approach for addressing the social factors associated with failure at school: compensatory programmes.

Finally, more recent explanations of failure – *centred on the school* – have looked at what happens inside the institution in terms of relationships and processes. Teacher expectations, their interaction with students and school leadership have been identified as key factors for determining educational outcomes. In particular, an influential school effectiveness paradigm has developed as a reaction to the literature on genetics and the socio-cultural approach. While this paradigm has attracted considerable interest amongst policy-makers, it has its limitations: there is no single, universally applicable set of “effective school characteristics”,<sup>1</sup> and a review of the literature suggests that school factors account for, at most, some 25 per cent of the variance in student performance. Although this is still significant in policy terms, it does put the effort to change schools into perspective. School based explanations have given rise to three types of measures for addressing failure: differentiated teaching, formative assessment and school improvement.

Today, there is a shared recognition among researchers that no single explanation of educational failure can be satisfactory. It has been accepted that failure is a multi-faceted problem, which can be viewed from different perspectives: psychological, social and institutional. This realisation has had three consequences, which have been crucial for policy development:

- a rejection of the assumptions that pupils’ achievements will be determined entirely by genetic inheritance or social background;
- an emphasis on the relative nature of failure, since it is a phenomenon which is closely associated with the general culture of a society and, especially, with its educational culture and organisation;
- an acknowledgement that no single policy can be suitable to address different dimensions and contexts of failure.

## THE PROBLEM REDEFINED

It is important to start by commenting on the argument that using the concept of “failure” when addressing low educational attainment is counter-productive. It can make the problem worse, by

stigmatising a student or organisation and therefore destroying their morale and self-confidence or reputation. In the case of *individual pupils*, there is an obvious need not to damage their confidence by labelling them in a way that they will find oppressive. The labelling of *institutional failure* has also been the cause of much controversy. The argument advanced in those countries where schools have been publicly labelled as “failing” is that such schools have lost their ability to improve themselves, and indeed often refuse to accept that they could do any better. In these circumstances, the argument runs, the shock of being publicly labelled “failing” is a necessary first step towards galvanising the school into action. Yet there is evidence, for example from the Education Priority Zones (ZEPs) in France, that designation of a school as part of a priority zone may prompt parents to send their children elsewhere. Because of this, some countries (for example, Australia, Denmark, Finland and Italy, among others) prefer to refer to measures for promoting the success of students and schools.

The concept of “failure” may vary according to the underlying ethos of a country’s education system. But large numbers of students leaving school with poor or no qualifications reflect a “failure” of the system in terms of preparing young people adequately for the demanding challenges of today’s societies. Moreover, increasing youth unemployment as well as the implementation of a lifelong approach to learning have brought to the forefront the need to develop more effective measures for promoting success at school for all students. In order to do so, a deeper understanding of the different manifestations of the problem is needed. To this end, it can be useful to distinguish between:

- risk of, or manifestation of failure at school, which exists when students become consistently low-achievers, or do not attain a minimum standard of performance at a given level of schooling;
- failure manifested in early school leaving, which occurs when pupils drop out of school before the end of compulsory schooling, or leave without having acquired the necessary qualifications to enter into the labour market;
- the consequences of failure for adult life, which are made evident when young people do not possess the appropriate knowledge or skills for successful integration into the world of work.

Chapter II proposes comparative indicators for each of these manifestations of educational failure.

## INDICATORS OF FAILURE

Comparative indicators of failure are scanty since the problem is defined differently in different countries; some of its manifestations do not easily lend themselves to quantitative analysis; and international comparisons of educational outcomes have only recently become an important policy focus in OECD countries.

This chapter examines different manifestations of failure by charting the statistical information which already exists, and identifying areas where measures ought to be developed. The intention is to emphasise the importance of developing a quantitative knowledge base on educational failure. For this purpose, three main data sources are used:

- firstly, two studies carried out by the International Association for the Evaluation of Educational Achievement (IEA), designed to measure the reading ability and performance levels in mathematics and science of students enrolled in lower secondary school;<sup>2</sup>
- secondly, the International Adult Literacy Survey (IALS);<sup>3</sup>
- thirdly, national data of OECD Member countries collected through the OECD Project on International Indicators of Education Systems (INES).<sup>4</sup>

One cautionary note needs to be made regarding the statistical analyses presented here. All of the indicators considered address failure *indirectly* and should not be seen as direct measures of it. Nevertheless, even these indirect measures of achievement and skill acquisition offer significant insights into the problem of failure.

The statistical data reported below are organised according to the *process view* of student failure described earlier: risk or manifestation of failure at school; failure manifested in early school leaving; and consequences of failure for adult life and employment prospects.

### RISK OR MANIFESTATION OF FAILURE AT SCHOOL

In all OECD countries, a proportion of pupils has difficulty in following the programmes of study set out in the curriculum. This is reflected in the fact that there is a significant diversity of performance among pupils of the same age or year group. Despite the manifold differences between national education systems, various international studies – notably those of the IEA – show that it is possible to develop comparative measures of student achievement, by assessing the performance of similar samples of pupils from each participating country on a common test. This section uses data from the IEA Reading Literacy and TIMSS studies to determine:

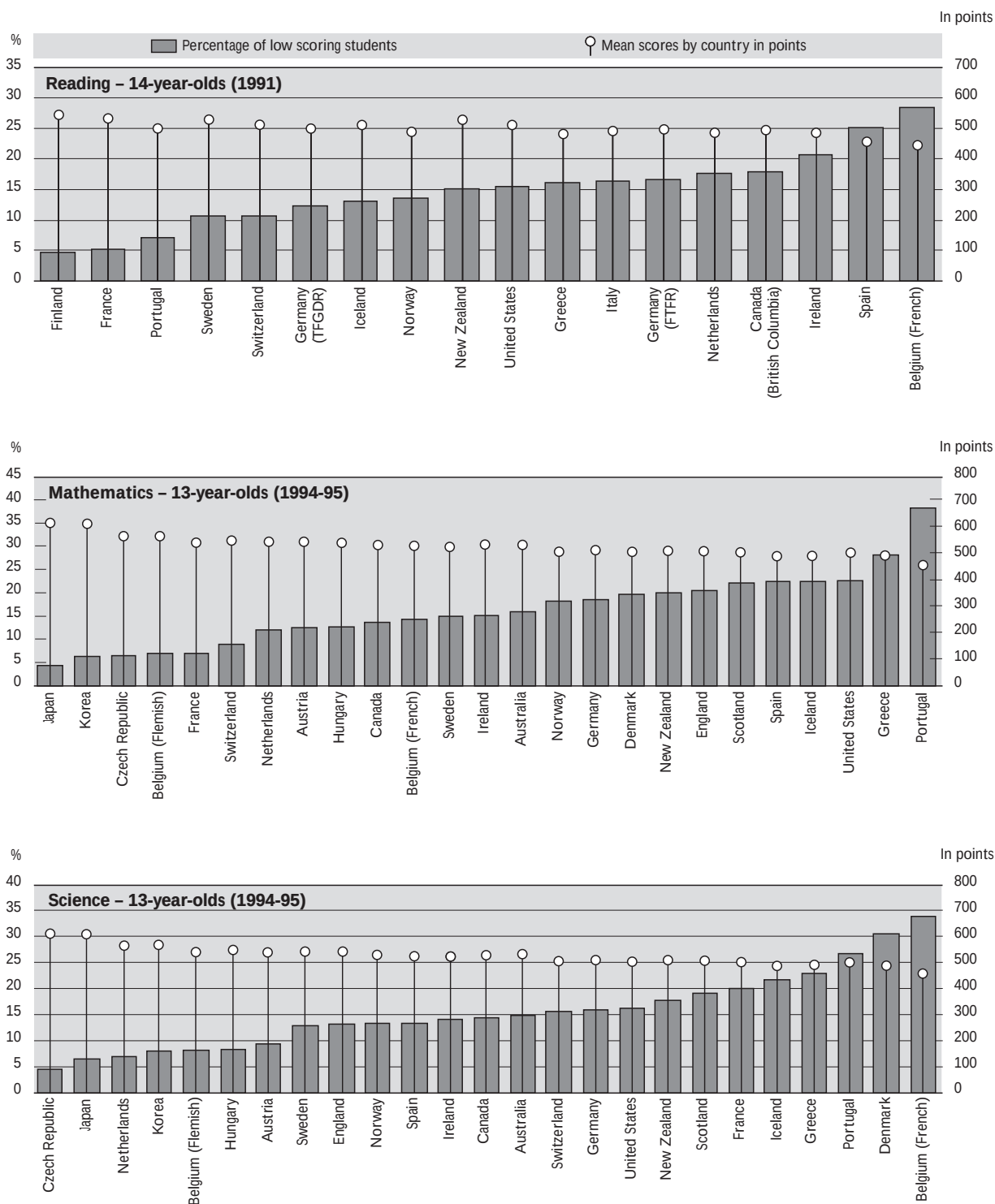
- which pupils could be seen as low achievers in relation to international norms;
- which pupils could, on a national basis, be considered most at risk of failing;
- some characteristics of these low-achieving students.

It also discusses briefly the category of pupils with special needs and the proportion of pupils who, in certain countries, are required to repeat a year of study.

### Low-achievement compared to an international standard

Figure 1 presents, for each OECD country that participated in the International Association for the Evaluation of Educational Achievement (IEA) Reading Literacy and TIMSS studies, the proportion of pupils aged 13-14 years whose test scores are substantially below the average score for all the OECD countries that took part in the study. Under-achievement, in this case, is defined as scoring at least one standard deviation below the international mean; a statistical definition that covers roughly the lowest-scoring 15 per cent of children across countries. The latter can be considered – to a large extent – as

◆ Figure 1. **Low achievement compared to an international standard**  
 Percentage of 13-14 year-old students scoring below standard – Mean scores by country in points



Countries are ranked by increasing percentage of low scoring students.

Sources: IEA, Reading Literacy Study and IEA, Third International Mathematics and Science Study, cited in OECD (1997a), Education Policy Analysis, p. 65.

“low-achievers”, in spite of the differences in curricula among countries. The charts also show the mean score attained in reading, mathematics and science for each country.

As can be seen in Figure 1, under-achievement varies greatly between countries. Between one in twenty and one in three children fail to reach a level of performance in reading, mathematics or science achieved by 85 per cent of children internationally. In some countries, the proportion of “weak pupils” is substantially lower than the expected 15 per cent:

- for *reading*, it is below 10 per cent in Portugal and France; and below 5 per cent in Finland;
- for *mathematics*, it is below 10 per cent in Switzerland, Belgium (Flemish community), France, the Czech Republic and Korea; and below 5 per cent in Japan;
- for *science*, it is below 10 per cent in Austria, Hungary, Belgium (Flemish community), Korea, the Netherlands and Japan; and below 5 per cent in the Czech Republic.

At the other end of the scale, some countries have a markedly higher proportion of school children with low achievement:

- in *reading*, the proportion of low achievers is over 20 per cent in Ireland and Spain, and almost 30 per cent in the French community of Belgium;
- in *mathematics*, over 20 per cent of children in England, Scotland, Spain, Iceland, the United States and Greece; and nearly 40 per cent in Portugal, perform poorly;
- in *science*, in which over 20 per cent of students under-achieve in France, Iceland, Greece and Portugal; and over 30 per cent in Denmark and the French community of Belgium.

Since fewer than half of the OECD countries participated in the three studies, no consistent “pattern of failure” across subjects can be identified for the OECD area. The only countries showing a fairly consistent profile are Sweden (where the proportion of low-achievers is less than 15 per cent in all three subjects) and the United States and New Zealand (where the reverse is true: in all three subjects the proportion with low scores exceeds 15 per cent). Most countries have mixed results; one example is France, where only 7 per cent of children under-achieve in mathematics, compared to 20 per cent in science.

On the other hand, the evidence shows a clear relationship between the percentage of “low-

achievers” and the mean scores attained for reading, mathematics and science by the entire student population. This need not be the case: in a country with an unequal distribution of achievement it is possible for high-achievers to raise the mean score, even though a large proportion of children are also under-achieving. This appears to be the case in New Zealand for reading: its average score places it amongst the higher-performing countries, but it still has 15 per cent of “weak” readers. Yet this case is atypical, for most countries with above-average mean scores also have a below-average proportion of weak performers, and vice versa.

### The range of achievement within countries

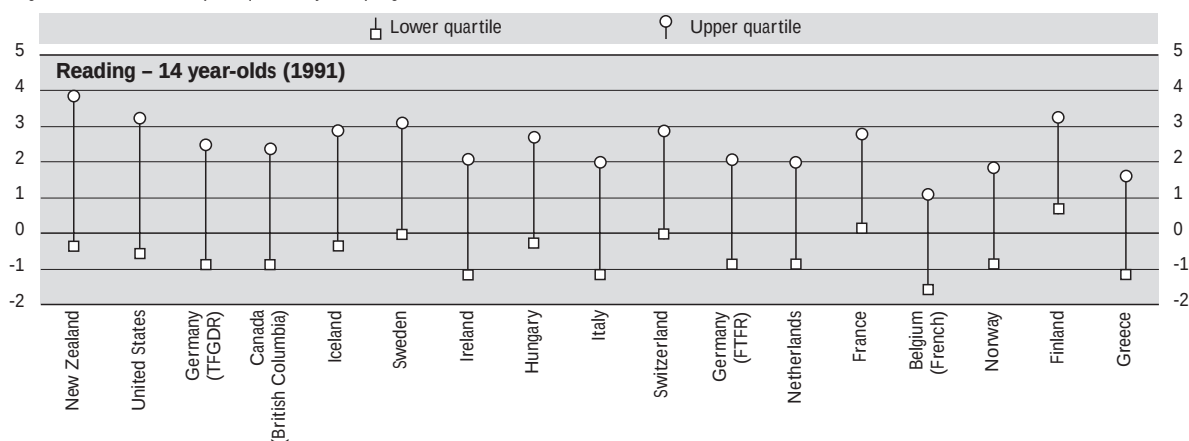
Another way of identifying under-achievement is to examine, within each country, the divergence in performance between the lowest and the highest scoring students on a given test. If this divergence in achievement is found to be equivalent to several years of schooling, it means that the “weaker students” are at great risk of failing at school or dropping out.

As can be seen from Figure 2, in all OECD countries that participated in the IEA Reading Literacy and TIMSS studies, there is a significant gap between the scores attained by the lowest and the highest scoring students. A standardised measure of this gap looks at the score below which the bottom quarter of the population performs, and the score above which the top quarter performs, and calculates the difference.<sup>5</sup> For *reading*, the gap ranges from 74 points in Portugal to 136 points in New Zealand. These ranges in point scores carry no intrinsic meaning in themselves, but can be better understood by looking at how much progress is made on average in OECD countries by a student in one year. On the basis of a scale elaborated for the IEA studies, it is possible to calculate the number of points by which an average student progresses in one year. So it can be said that 31 points correspond, on average, to about one year’s progress in *reading*; 33 points to a year’s progress in *mathematics*; and 40 in *science*.

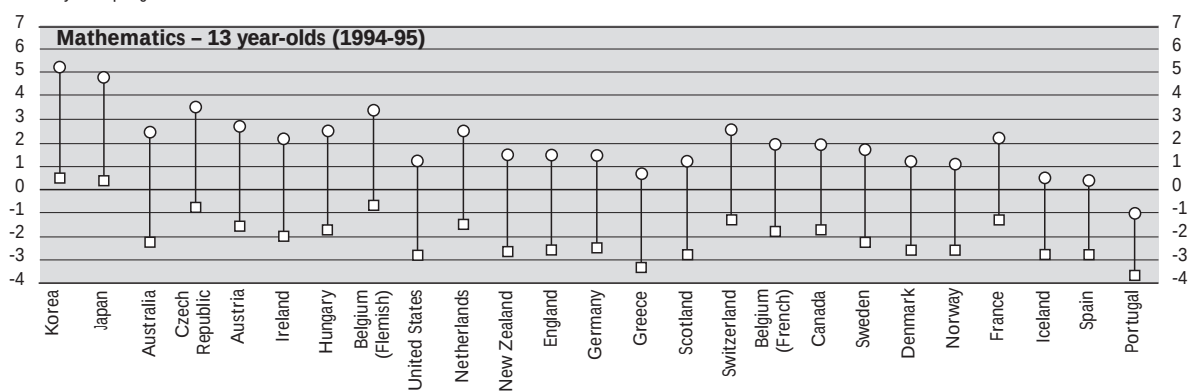
The reading results show that in the average OECD country (participating in the IEA studies), the best scoring 14-year-olds in the bottom quarter of the population is 3.2 years behind the worst-scoring 14-year-olds in the top quarter – a wide range of achievement by any standard. Similar patterns can be observed for performance in mathematics (3.7 years) and science (3.1 years). The difference in achievement between lowest and highest scoring

◆ Figure 2. **Range of achievement within countries***Lower and upper quartiles, relative to international mean, in equivalent years' progress*

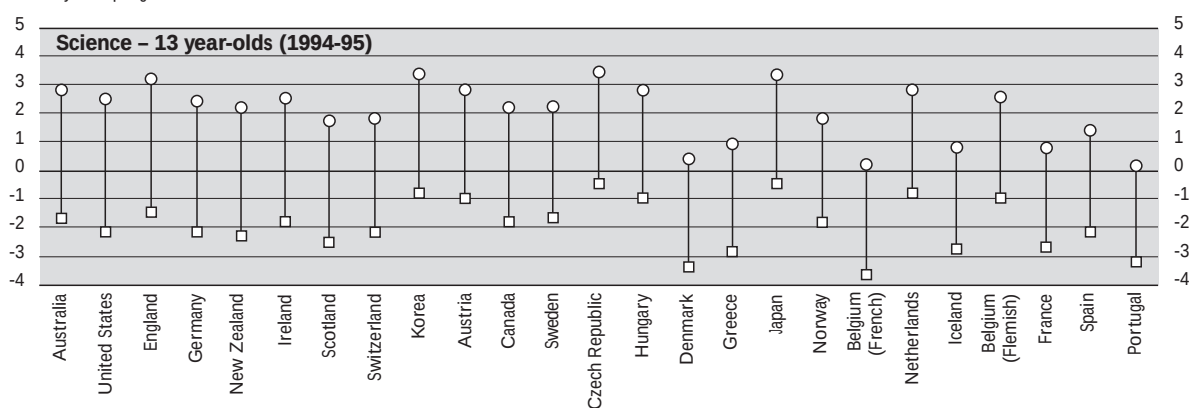
Difference between lower and upper quartile and the international mean  
(including non-OECD countries) in equivalent years' progress



Difference between lower and upper quartile and the OECD mean  
in equivalent years' progress



Difference between lower and upper quartile and the OECD mean  
in equivalent years' progress



Countries are ranked by decreasing variation in achievement.

Sources: IEA, Reading Literacy Study et IEA, Third International Mathematics and Science Study, cited in OECD (1997a), Education Policy Analysis, p. 67.

students across the countries having participated in the IEA studies is equivalent to between 2½ and 4½ years of schooling for *reading* and *mathematics*; and to between 2½ and 3½ years of schooling for *science*. So in all OECD education systems, and in all three subjects, there is a substantial gap between the level attained by the weakest 25 per cent of pupils and the level attained by the strongest 25 per cent in the same grade. It is important to note that the smaller difference in achievement observed for Portugal, across all three subjects, might be due partly to the significant number of children in that country who dropped out of school or repeated a year of study before the testing age.

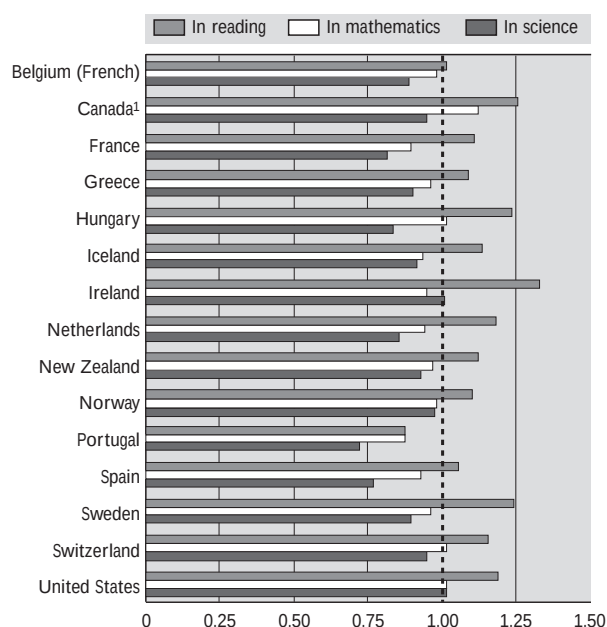
The difference in achievement between the lowest and the highest scoring students, in each country, appears to be wider in those countries that attain better mean scores. This is particularly the case for performance in *mathematics*. There are, however, exceptions to this pattern. The widest range of achievement in *reading* is found in New Zealand while one of the narrowest is found in Finland, both countries with high average reading scores. On the other hand, a moderate range of achievement in *science* can be found in the Flemish community of Belgium and the Netherlands, both countries with high average scores in science. These exceptions show that *a wide range of achievement is not a necessary condition for a system to attain a high average performance.*

### The profile of pupils “at risk”

When the characteristics of the 15 per cent “weakest pupils” in each OECD country in the IEA Reading Literacy and TIMSS studies are analysed,<sup>6</sup> they are found to have a similar profile in all countries. Figures 3a and 3b present data on gender differences and language spoken at home by such students.

Figure 3a looks at the proportion of boys amongst the “weak students” – in reading, mathematics and science – compared to the proportion of boys among all students. In order to make such a comparison, a ratio was calculated between the percentage of boys in the 15 per cent lowest scoring students, and that in the total sample. A ratio which is higher than 1 indicates a predominance of boys over girls among the lowest achieving students; and vice versa, a ratio smaller than 1 indicates a predominance of girls. For *reading*, the graph shows a ratio which is higher than 1 in 14 out of the 15 countries. On the other hand, it shows a ratio which is

◆ Figure 3a. *Ratio of the percentage of boys scoring in the lower 15% compared to the percentage of boys among all students*



1. Only British Columbia for reading literacy.

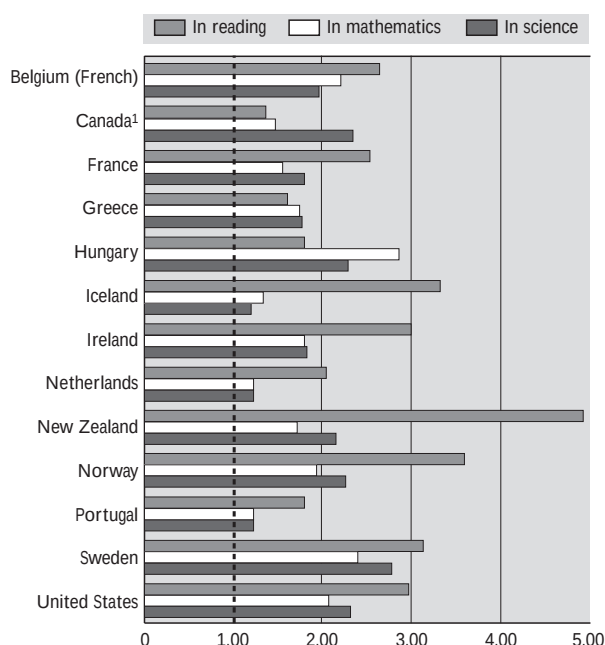
Sources: IEA, *Reading Literacy, Population II* (“14 year-olds”); TIMSS.

smaller than 1 in 11 countries for *mathematics*, and in 13 for *science*.

In most Member countries, there are more boys than girls in the group of pupils with the lowest *reading* scores. But girls seem to perform worse than boys in *mathematics* and *science*. Although a tendency has been observed over the past few decades for gender differences to become less marked, *major differences remain at both ends of the distribution*. Clearly, a greater effort needs to be made to reduce such differences.

Figure 3b shows the proportion of low-achieving students speaking another language at home than at school, when compared to the total sample. In order to make such a comparison, a similar ratio to the one calculated for Figure 3a was used which – in this case – is higher than 1 in all 13 countries for the three subjects. One can therefore conclude that pupils who speak a different language at home than that of instruction are more likely to be among the 15 per cent with the lowest skills in *reading*, *mathematics* and *science*.

◆ Figure 3b. *Ratio of the percentage of students speaking a language at home other than the language of instruction, scoring in the lower 15%*



1. Only British Columbia for reading literacy.

Sources: IEA, *Reading Literacy, Population II* ("14 year-olds"); TIMSS.

The linguistic handicap experienced by students from an immigrant background is often compounded by a second, socio-economic handicap. The IEA Reading Literacy and TIMSS studies seem to confirm this fact; they also show that children belonging to an ethnic minority are more at risk of failing than "native students". However, comparisons across countries are problematic, since the size, ethnic origin and social status of these minorities differ from one country to the next. As international migration increases, it will become more important to compare the effectiveness of special programmes set up to facilitate the integration of such students in OECD countries. In order to do so, an effort needs to be made to gather data at the national and international levels, which reflect the different characteristics of the immigrant population across countries.

### Students with special educational needs

Students with special needs and pupils at risk of failing at school are two distinct categories, but

there is an obvious overlap between the factors which create the need for remedial action. This issue has been explored in the publication *Integrating Students with Special Needs into Mainstream Schools* (OECD, 1995a), which emphasises the wide variations among countries in defining special needs. The key statistical observation which is of interest here is that the proportion of pupils in each country's total school population for whom some form of special provision is made varies widely: from 1 per cent in Japan and Turkey, to 13 per cent in Denmark, 16 per cent in Iceland and 17 per cent in Finland. This wide variation between different countries' definition of special educational needs reflects, to some extent, the importance that individual countries attach to the failure problem. The Nordic countries, for example, have developed elaborate arrangements for helping such pupils, and define special needs in broad terms, including behavioural problems.

### Grade repeaters

Requiring low-achieving pupils to repeat a year of study is only one facet of the wider problem of low performance, but it is sufficiently widely practised – in at least a third of OECD Member countries, and commonly in Eastern Europe – to warrant separate treatment. Table 1 includes data for some of these countries that demonstrate a broad range of practice: for example, at primary level it ranges from zero in New Zealand to 7 per cent in Mexico – and there is a tendency to higher rates of repetition in secondary education. Furthermore, retention rates are systematically higher for boys than for girls with the exception of primary education in Turkey.

Since the practice of making pupils repeat a year is a deliberate decision, the question arises whether it should be regarded as a manifestation of failure which is a negative consequence of the system itself, or a positive policy designed to combat failure. In some of the countries where this practice exists, the cumulative effects of grade repetition have resulted in a substantial proportion of students being overaged for the grade in which they are enrolled.

Figure 4 shows, for each country, the proportion of students in the IEA Reading Literacy and TIMSS samples, whose age could be considered above the normal range in the grade level concerned. If grade repetition helps redistribute students to the grade matching their ability, then countries with a high proportion of children above the normal age might

Table 1. **Grade repeating in primary and secondary education,<sup>1</sup> 1995**  
(As a percentage of total enrolment<sup>2</sup>)

|                | Primary      |       |         | Lower secondary |       |         | Upper secondary |       |         |
|----------------|--------------|-------|---------|-----------------|-------|---------|-----------------|-------|---------|
|                | <b>Total</b> | Males | Females | <b>Total</b>    | Males | Females | <b>Total</b>    | Males | Females |
| France         | ..           | ..    | ..      | <b>10.0</b>     | ..    | ..      | <b>15.3</b>     | ..    | ..      |
| Ireland        | <b>1.7</b>   | 1.9   | 1.6     | ..              | ..    | ..      | <b>6.7</b>      | 7.1   | 6.3     |
| Mexico         | <b>7.0</b>   | 8.1   | 5.9     | <b>1.6</b>      | 2.3   | 0.9     | <b>4.0</b>      | 4.5   | 3.6     |
| Italy          | <b>0.6</b>   | 0.7   | 0.4     | <b>5.3</b>      | 7.2   | 3.3     | <b>3.9</b>      | 5.1   | 2.9     |
| Hungary        | <b>2.7</b>   | ..    | ..      | <b>2.5</b>      | ..    | ..      | <b>2.8</b>      | 3.1   | 2.6     |
| New Zealand    | <b>0.0</b>   | 0.0   | 0.0     | <b>0.0</b>      | 0.0   | 0.0     | <b>2.6</b>      | 3.2   | 2.0     |
| Germany        | <b>1.8</b>   | 2.0   | 1.5     | <b>3.1</b>      | 3.6   | 2.6     | <b>2.1</b>      | 2.6   | 1.7     |
| Czech Republic | <b>1.0</b>   | ..    | ..      | <b>1.2</b>      | ..    | ..      | <b>0.4</b>      | 0.4   | 0.4     |
| Finland        | <b>0.4</b>   | 0.5   | 0.2     | <b>0.5</b>      | 0.7   | 0.3     | <b>0.0</b>      | 0.0   | 0.0     |
| Turkey         | <b>5.4</b>   | 5.3   | 5.5     | <b>8.4</b>      | 9.9   | 5.8     | <b>0.0</b>      | 0.0   | 0.0     |

Countries are ranked indecreasing order by percentage of total grade repeating in upper secondary.

Notes:

.. missing value, nil or negligible.

1. Data refer to all general programmes for secondary education and to all educational programmes for primary education.

2. Total number of repeaters as a percentage of total full-time and part-time enrolments by level of education in both public and private institutions.

Source: OECD Education Database.

be expected to have a narrower range of achievement within the grade being tested. It is indeed the case that, in all three subjects, the achievement range is below average in the four countries with the highest proportion of over-age pupils – Portugal, France, the French community of Belgium and Spain (see Figure 2). But the data also show that the students of “above normal” age have more trouble in reading, mathematics and science than their classmates, which suggests that repetition is not doing much to improve the skills of the pupils held down for a year or more.

In most countries, the gap in average ability between “overage” pupils and “normal age” pupils is the equivalent of between 2 and 3 years worth of schooling in *reading*; between 1 and 3 years in *mathematics*, and between 1 and 2 years in *science*.<sup>7</sup> Also worthy of note is the fact that countries where repetition is not practised, notably the Nordic countries, do not have a comparatively greater range of achievement amongst their pupils (see Figure 2). *The serious doubts which surround the effectiveness of repetition as an educational approach, suggest its prevalence in an education system is more a manifestation of failure than an initiative likely to generate success.*

## FAILURE MANIFESTED IN EARLY SCHOOL LEAVING

A problem faced by all OECD Member countries is that of pupils who leave education before finishing their studies, or with a qualification which

will be of limited value in the labour market. Such manifestations of failure are clearly visible, and their consequences have become increasingly damaging to the life chances of individuals and to economic competitiveness. Early school leaving has therefore become a main focus of policy in many OECD countries. But paradoxically, obtaining reliable data on these phenomena – that are nationally representative and/or internationally comparable – is particularly difficult.

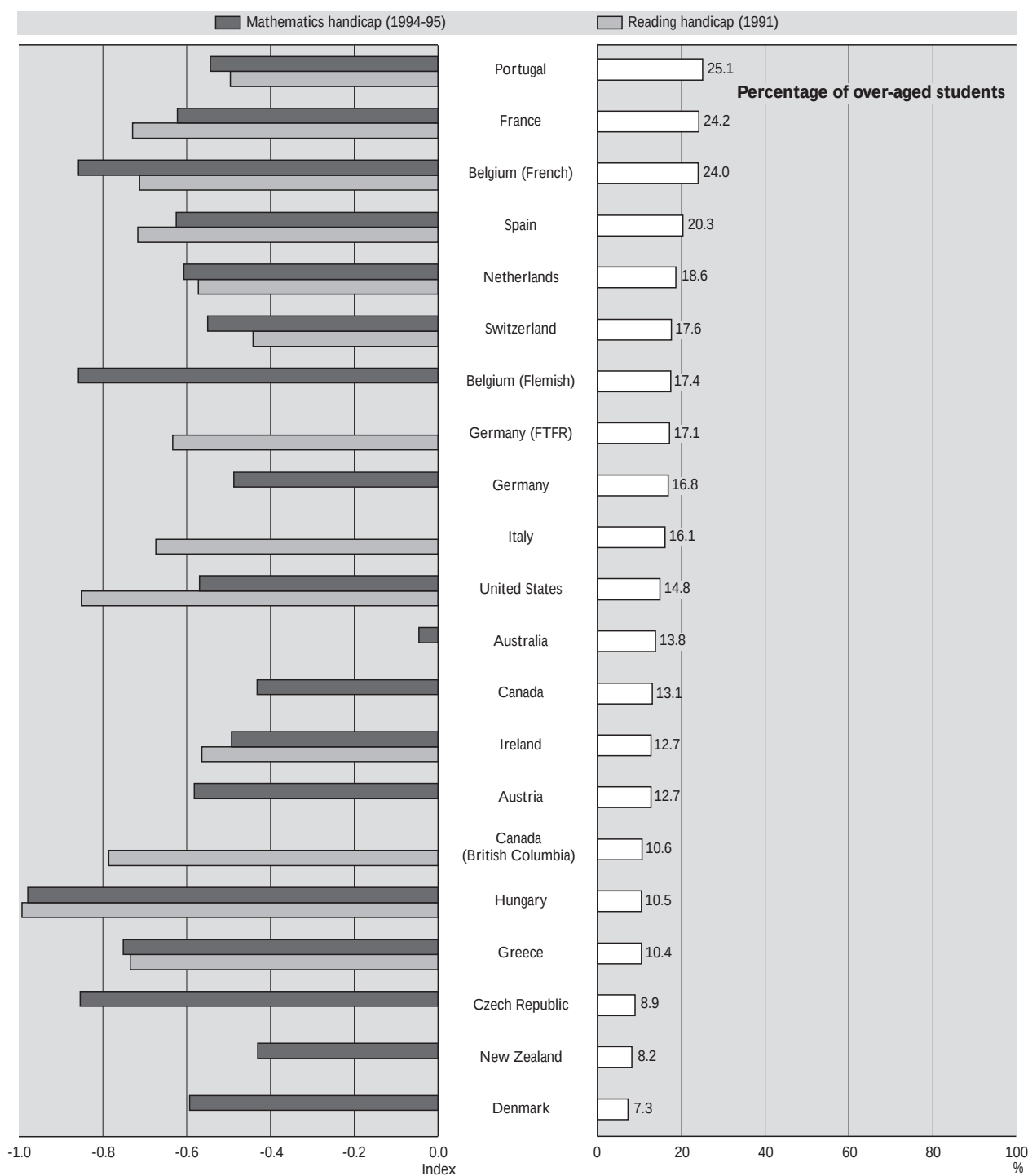
Early school leavers may drop out of school without finishing a course of study; or they may finish the course but leave without the relevant qualifications. National data from OECD countries, collected within the INES Project, provide useful estimates about the dimension of both of these problems.

## Three measures of drop-out

The age at which compulsory schooling ends in OECD countries varies between 14 and 18. While young people's status on the labour market is determined by more than whether they complete compulsory schooling, participation in and completion of upper secondary education are becoming increasingly important. So Figure 5 looks at three alternative measures of drop-out: the proportion of young people who are not participating at the compulsory leaving age; the proportion not participating at the age of 17, when upper secondary education is normally underway; and the proportion not participat-

◆ Figure 4. **Handicap of over-aged students**

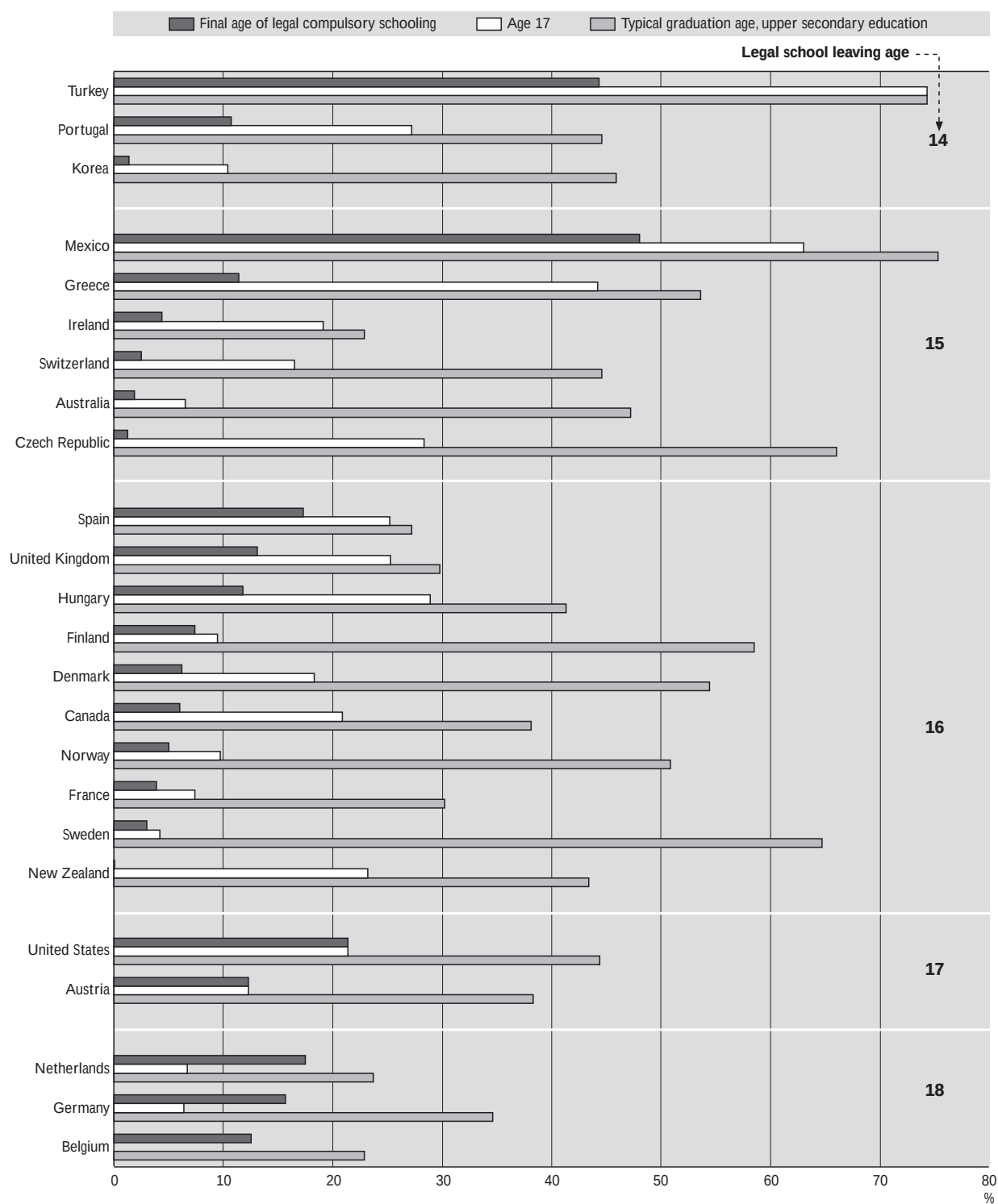
*Difference from national mean, on index from -1 (most behind) to 0 (least behind)*



Countries are ranked by decreasing percentage of over-aged students in the TIMSS sample, except Germany, Italy and Canada (British Columbia) for which only reading literacy data are available.

Sources: IEA, *Reading Literacy Study* and IEA, *Third International Mathematics and Science Study*, cited in OECD (1997a), *Education Policy Analysis*, p. 69.

◆ Figure 5. **Three measures of drop-out**  
 Percentage of age-group not enrolled at a particular age



Countries are ranked by the percentage of children not enrolled at the final age of legal compulsory schooling.  
 Source: OECD Education Database (1995), cited in OECD (1997a), *Education Policy Analysis*, p. 72.

ing at the expected year of upper secondary completion.

While double enrolments can lead, in a few cases, to apparent rates of above 100 per cent, two general conclusions can nonetheless be drawn:

- Higher leaving ages are not systematically associated with higher drop-out rates. Drop-out rates tend to be between 0 and 15 per cent up to final legal compulsory schooling age, with the exception of the United States, where it is close to 20 per cent; and Mexico and Turkey, where they are around 50 per cent. Yet, there seems to be no discernible relationship between the age at which young people are allowed to leave school and the rate at which they drop out before that age. In the case of Belgium, for example, where the final legal compulsory schooling age is 18, the percentage of students not enrolled at this age is 12.5. On the other hand, in a country like Turkey – where the final legal compulsory schooling age is 14 – this percentage is three times higher.
- Enrolment drops after the final compulsory school leaving age in almost all countries, albeit to markedly varying degrees. Higher leaving ages appear to be associated with higher participation throughout upper secondary education. Although the proportion remaining in school until the age of 17 or 18 can exceed 80 or 90 per cent, even in countries where leaving age is 16 or below, the evidence shows that education systems with a higher upper limit tend to succeed in keeping more young people at school until the end of upper secondary education. This could argue for raising the age for completing compulsory education in those countries where it is lowest.

However, data on student's reasons for leaving school before finishing their studies make it evident that the extension of compulsory schooling can only have a limited effect. Findings<sup>8</sup> show that approximately twice as many drop-outs cite reasons over which they had no control (institutional pressures, economic need or family reasons) as those who say they left school out of personal choice (lack of interest in education or desire to take up employment).

The degree to which drop-outs become an economic burden on society can be assumed to vary across countries, one significant factor being the level of educational qualification demanded by employers. A 1989 survey by the Japanese Ministry of Education, Science, Sports and Culture found that only 5.6 per cent of upper secondary school drop-outs went into unemployment after leaving school.

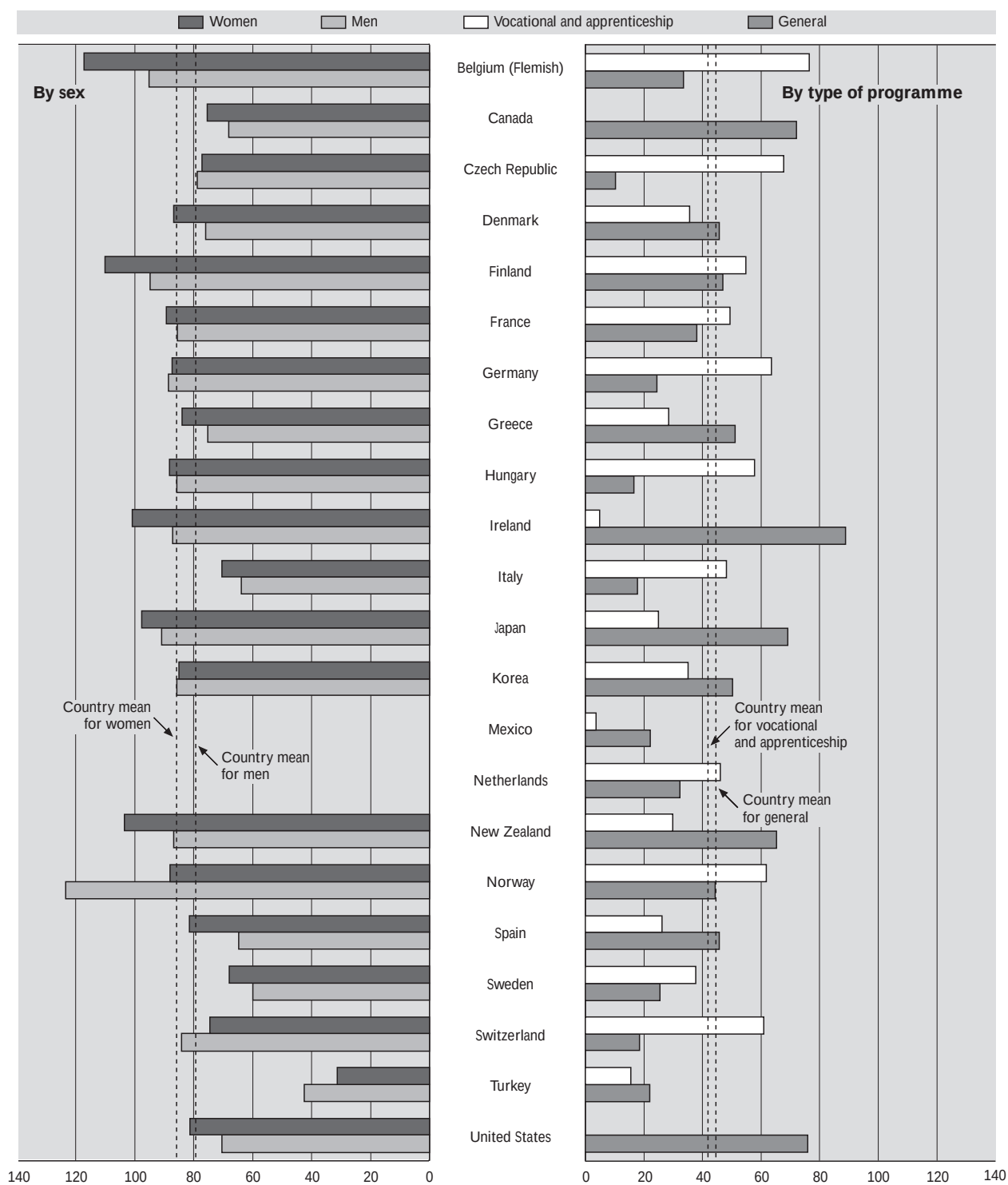
Although this figure has increased in recent years due to economic recession in Japan, it still contrasts with the situation in Canada, where 34 per cent of male and 26 per cent of female drop-outs became unemployed. Yet, even if students who leave before the end of compulsory school do obtain jobs fairly quickly, these are often only short-lived or low paid. They may be enough to tempt them away from education, especially in areas of high unemployment, but often turn out to be dead ends (see OECD, 1997a). Experience in OECD countries shows the importance of three measures for the prevention of dropping out of school that will be discussed in Chapter III: curriculum reform, facilitating the transition points throughout the schooling process, and provision of better guidance services.

### **Pupils who leave with no qualifications**

Some idea of the size of the “qualification deficiency” is given by comparative data on graduation rates in upper secondary education.<sup>9</sup> As in the case of drop-out data, these figures have to be interpreted with caution, since definitions of “graduation” vary among OECD Member countries: at the end of upper secondary education most (but not all) OECD countries have a leaving qualification based on an examination. In some countries this examination is administered by external agencies and in others by schools with varying degrees of external moderation. Furthermore, grade repetition may distort the statistics since the “graduation rate” measures graduates at the theoretical age of graduation, as a percentage of the total school population at that age. Additionally, in some countries, and especially in those with apprenticeship training programmes, students may gain more than one upper secondary qualification, which may lead to double counting and apparent completion rates of over 100 per cent.

Even allowing for these caveats, the data in Figure 6 reflect a wide range of upper-secondary graduation rates, from under 40 per cent in two countries to over 90 per cent in six countries. An equally wide variation between countries is found if one compares general and vocational qualifications. No relationship can therefore be established between graduation rates and the type of educational programme. But female graduation rates do seem to be slightly higher than male graduation rates, probably because males on average tend to enter the labour market earlier. However, high unemployment rates or relatively low earnings for

◆ Figure 6. *Ratio of upper secondary graduates to population at typical age of graduation (times 100)*



Source: OECD (1997a), *Education Policy Analysis*, p. 83.

those having attained less than upper secondary education suggest that these non-graduate males are likely to be economically at risk. One may therefore conclude that *young people with no qualifications will be almost as vulnerable, economically and socially, as those who drop-out.*

Having said that, it must be emphasised that the level of qualification needed to enter the labour market is defined – to a considerable extent – by employers’ perceptions and expectations. And employers’ views of what constitutes an adequate level of qualification have undergone a seemingly permanent upward shift since the early 1970s, as confirmed by a recent transnational study of the Netherlands, Ireland and the United Kingdom (Hannan *et al.*, 1995). It is therefore important to stress that what constitutes an “appropriate” qualification is a “moving target”, and hence a problem that cannot be addressed by schools alone.

A characteristic likely to be shared by drop-outs and non-graduates is poor motivation towards formal education. This presents a double danger. Firstly, without the will or confidence to make an effort these young people are obviously at risk of drifting into unemployment, or into unskilled or precarious work. Secondly, if they leave with no belief in the value of education, or with a distaste for it, there is a low probability that they will engage in further training at a later stage. At a time when the half-life of knowledge is shortening and the labour market increasingly requires constant adaptability and an updating of skills, indifference or resistance to education are economic liabilities.

## CONSEQUENCES OF FAILURE FOR ADULT LIFE AND EMPLOYMENT PROSPECTS

However easy or difficult their passage through school, and whether or not they obtain a qualification, a certain number of students leave education without having acquired the foundation skills necessary for their social and productive integration into modern society. This fact has become a central concern for policy-makers in OECD Member countries. The evidence on youth employment during the last decade justifies this concern: there has been a considerable increase in the vulnerability to unemployment of young people and there is a growing threat of economic marginalisation to those who enter the labour market with inadequate skills.

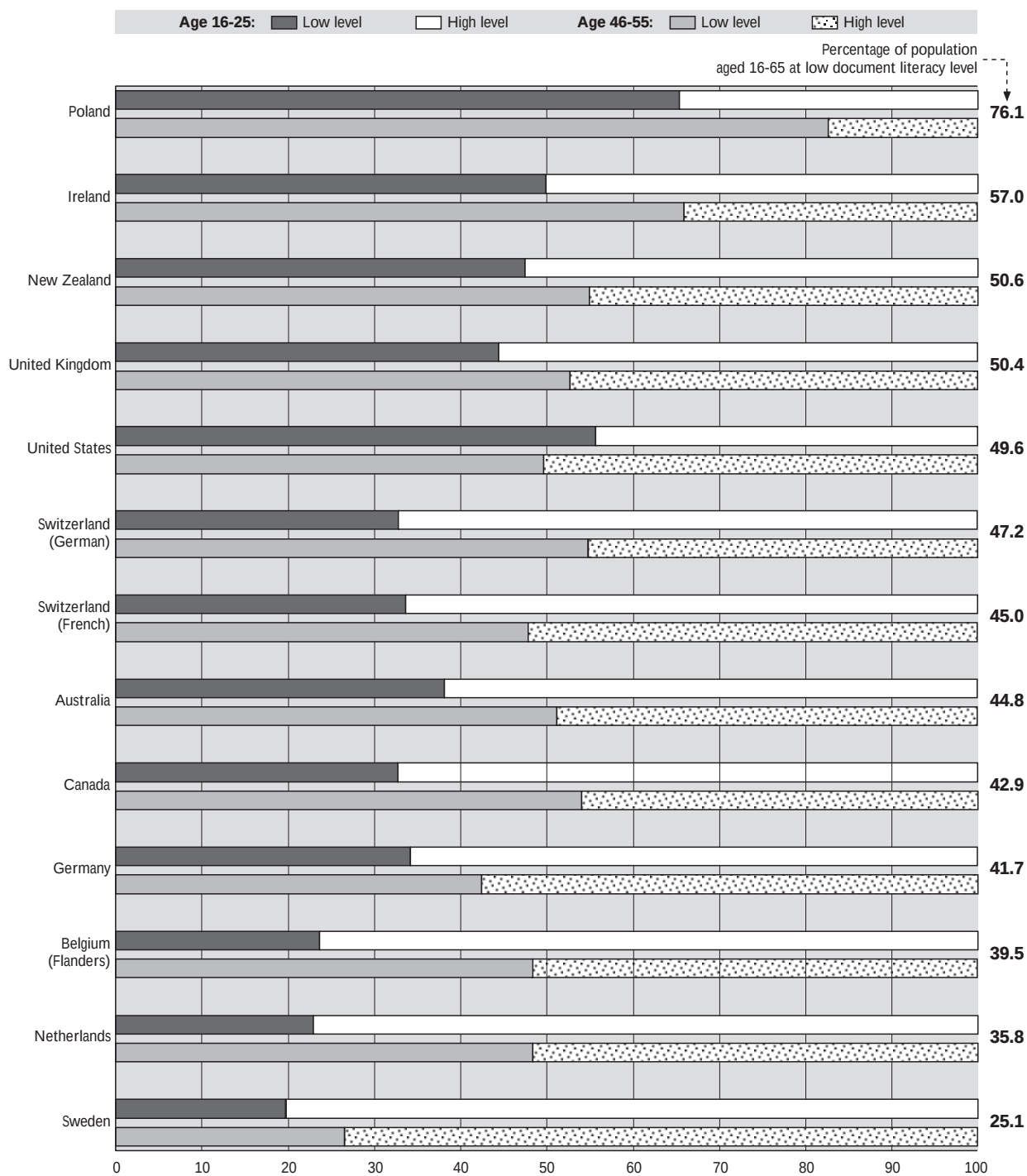
Some idea of the link between inadequate skills and labour market status is provided by the

International Adult Literacy Survey (IALS). In this survey, literacy is understood as a set of skills used at work and in every day life with different levels of proficiency. The literacy skills of those surveyed were graded on a rising five point scale, within which skill levels 1 and 2 were judged inadequate to meet the demands of daily life and, in particular, the needs of the labour market.<sup>10</sup> Although the IALS data cover the age range 16 to 65, the analysis below mainly uses data for the sample aged between 16 and 35.

### Young adults with inadequate foundation skills

Figure 7 sets out the proportion of 16 to 25 year-olds with low skills (levels 1 and 2) in the 12 countries covered by IALS. Even though there are marked variations among the results for these countries, there is a tendency for successive cohorts to record better literacy scores: the 16-25 year-olds doing better than the 46-55 year-olds (the exception to this is the United States, which shows the opposite trend). Yet in all countries, there still is a substantial proportion of young people who lack the literacy skills necessary to ensure their social and economic integration. This proportion amounts to between 30 and 50 per cent in 8 out of the 12 countries; and it varies from 20 per cent in the highest achieving country (Sweden), to 65 per cent in the lowest (Poland).

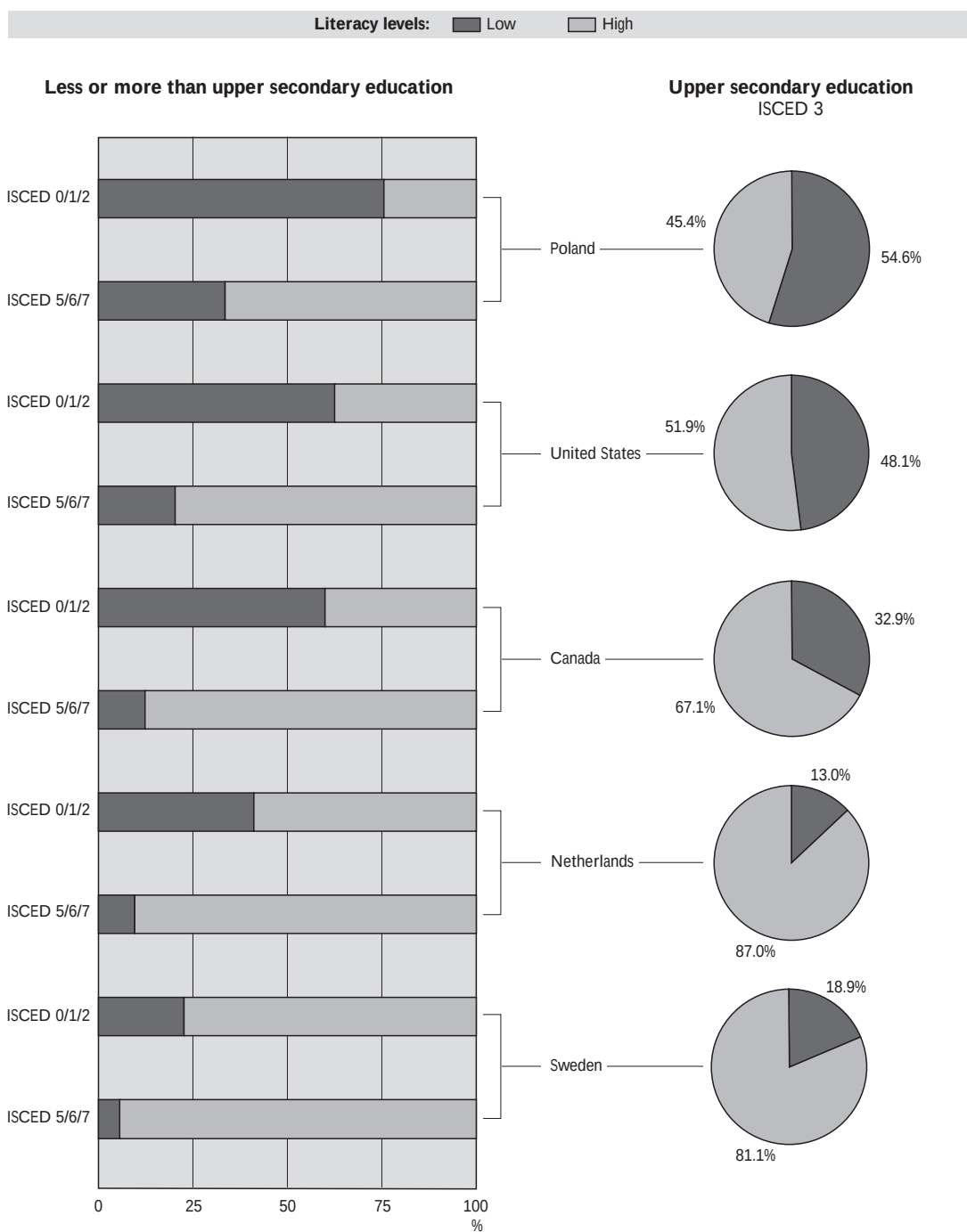
Figure 8 charts, for 16-29 year-olds, the literacy performance at each of the four levels against highest completed level of education. Level 3 of the International Standard Classification of Education (ISCED) is taken to be equivalent to the completion of secondary education. There is a strong correlation between possession of adequate levels of literacy (level 3 and above, as measured by IALS) and completion of secondary education (ISCED level 3 and above), pointing to the need to prevent pupils from dropping out of secondary education wherever possible. More surprising, however, is the difference between countries where a sizeable proportion of those who left before completing upper secondary school nonetheless still have reasonable literacy skills – Sweden, the Netherlands and Germany – and countries where the proportion of such people is noticeably lower – the United States and Poland. This suggests the possibility of significant differences in output between different education systems. While in Sweden only 23 per cent of 16-29 year-olds with less than upper secondary education have low literacy levels, in the United States

◆ Figure 7. *Percentage of population aged 16-25 and 46-55 at low and high document literacy levels*

Countries are ranked by decreasing percentage of population aged 16-65 at the low document literacy level.

Source: OECD and Statistics Canada (1995), *Literacy, Economy and Society - Results of the First International Adult Literacy Survey*.

◆ Figure 8. *Repartition of low and high document literacy levels by educational attainment, 16-29 year-olds*



Countries are ranked by decreasing percentage of low literacy level at less than upper secondary education.

ISCED 0/1/2 refers to lower secondary schooling as the highest completed level.

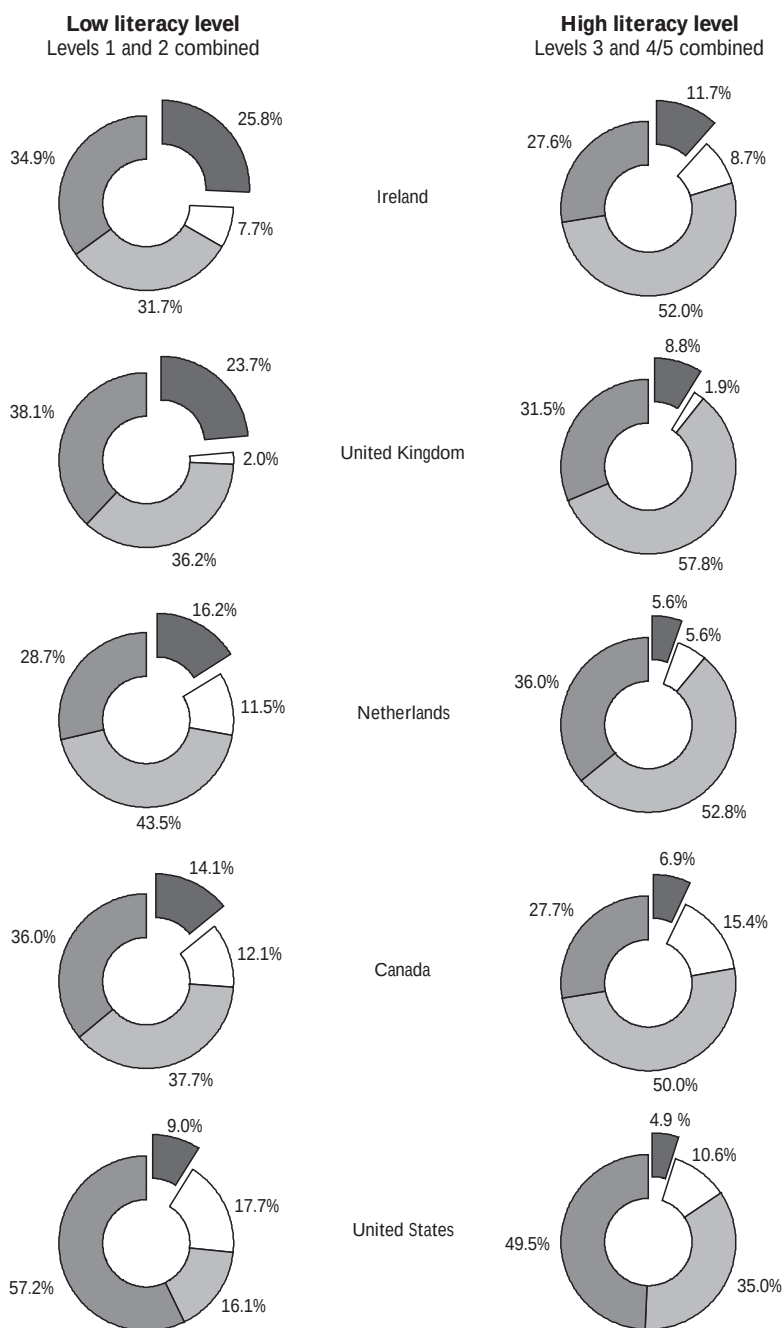
ISCED 3 refers to upper secondary education.

ISCED 5/6/7 refers to tertiary education, either of a university or non-university type.

Source: International Adult Literacy Survey, 1994-95.

◆ Figure 9. **Literacy, employment and income among young people**  
 Percentage of 16-35 year-olds at low and high literacy levels by labour force status and earnings

□ No income information    □ Medium or high income    □ Low or no income    ■ Unemployed



Countries are ranked by decreasing percentage of unemployed with a low literacy level.  
 Source: International Adult Literacy Survey, cited in OECD (1997a), Education Policy Analysis, p. 75.

this proportion is almost three times higher (63 per cent). This result implies that some systems may be more effective than others in addressing the needs of disadvantaged students at the primary and lower secondary levels.

### **Economic and social vulnerability of low achievers**

Figure 9 sets out, for the age range 16-35, the proportion of the sample with low or high levels of literacy who are employed (according to salary), or unemployed. Because of the small sample size, the graph can offer reliable figures for only five countries: Canada, Ireland, the Netherlands, the United Kingdom and the United States. In all five countries, young people with poor literacy scores are more likely to be unemployed, although substantial numbers of them still have jobs.

In Canada, Ireland and the United States, unemployment is twice as high for young people with low literacy skills as it is for their high-literate peers. In the Netherlands and the United Kingdom the differences are even larger. Although young people with poor skills may be working, their jobs will not necessarily be stable, rewarding or well-paid. For workers with low literacy skills, the prospect of

holding better-paid jobs varies among countries. In the United States, they are 3.5 times as likely to be among the worst-paid workers. But in Canada, Ireland and the United Kingdom, the chances are about even for young adults with low literacy skills to have low or high income, although there is a clear earnings advantage for their high-literate peers. These young adults with high skills have employment rates with medium or high income 2.2 times (the United States) to 1.2 times (the Netherlands) higher than those with low skills.

*As well as reinforcing the need to address the problem of early school leaving, the indicators from IALS call into question the real value of the qualifications obtained by upper secondary school graduates. They justify the efforts undertaken in some countries (for example, Germany, the Netherlands, the United Kingdom and the United States) to specify more closely the standards or levels of skills young people need to have attained by the time they complete a full cycle of secondary education. Finally, they strengthen the case for improving the quality of initial schooling. As will be argued in Chapter III, the early years of education have been found to be crucial for foundation learning as well as for developing the motivation for life-long learning.*

**STATISTICAL ANNEX TO CHAPTER II**  
**Data for the figures**

**13-14 year-old students<sup>1</sup> considered as low-achievers<sup>2</sup> in reading (1991), mathematics and science (1994-1995)**

(Data for Figure 1)

|                           | Low scoring students<br>(in percentages) in: |             |           | Mean scores by country<br>(in points) in: |             |            |
|---------------------------|----------------------------------------------|-------------|-----------|-------------------------------------------|-------------|------------|
|                           | Reading                                      | Mathematics | Science   | Reading                                   | Mathematics | Science    |
| Australia*                | –                                            | (15.9)      | (14.7)    | –                                         | 530         | 546        |
| Austria*                  | –                                            | (12.5)      | (9.5)     | –                                         | 540         | 558        |
| Belgium                   |                                              |             |           |                                           |             |            |
| Flemish community         | –                                            | 6.9         | 8.2       | –                                         | 565         | 550        |
| French community*         | 28.4                                         | (14.2)      | (33.8)    | 446                                       | 526         | 471        |
| Canada                    | –                                            | 13.7        | 14.3      | –                                         | 528         | 531        |
| British Columbia          | 17.9                                         | –           | –         | 494                                       | –           | –          |
| Czech Republic            | –                                            | 6.4         | 4.5       | –                                         | 564         | 574        |
| Denmark*                  | n.a.                                         | (19.7)      | (30.4)    | n.a.                                      | 503         | 479        |
| Finland                   | 4.7                                          | –           | –         | 545                                       | –           | –          |
| France                    | 5.3                                          | 6.9         | 20.0      | 531                                       | 539         | 498        |
| Germany*, <sup>3</sup>    | –                                            | (18.6)      | (15.8)    | –                                         | 509         | 531        |
| TFGDR                     | 12.3                                         | –           | –         | 501                                       | –           | –          |
| FTFR                      | 16.6                                         | –           | –         | 498                                       | –           | –          |
| Greece*                   | 16.1                                         | (28.1)      | (22.8)    | 482                                       | 484         | 497        |
| Hungary                   | –                                            | 12.6        | 8.4       | –                                         | 538         | 554        |
| Iceland                   | 13.1                                         | 22.4        | 21.6      | 514                                       | 487         | 494        |
| Ireland                   | 20.6                                         | 15.2        | 14.1      | 484                                       | 528         | 539        |
| Italy                     | 16.4                                         | –           | –         | 488                                       | –           | –          |
| Japan                     | –                                            | 4.4         | 6.5       | –                                         | 605         | 571        |
| Korea                     | –                                            | 6.3         | 8.1       | –                                         | 607         | 565        |
| Netherlands*              | 17.6                                         | (11.9)      | (7.0)     | 486                                       | 541         | 560        |
| New Zealand               | 15.1                                         | 20.0        | 17.6      | 528                                       | 508         | 526        |
| Norway                    | 13.6                                         | 18.2        | 13.3      | 489                                       | 503         | 527        |
| Portugal                  | 7.1                                          | 38.2        | 26.6      | 500                                       | 455         | 480        |
| Spain                     | 25.1                                         | 22.3        | 13.4      | 456                                       | 487         | 517        |
| Sweden                    | 10.6                                         | 14.8        | 12.8      | 529                                       | 519         | 535        |
| Switzerland               | 10.7                                         | 8.8         | 15.6      | 515                                       | 546         | 522        |
| United Kingdom            |                                              |             |           |                                           |             |            |
| England                   | –                                            | 20.5        | 13.1      | –                                         | 507         | 553        |
| Scotland*                 | –                                            | (22.0)      | (19.0)    | –                                         | 500         | 519        |
| United States             | 15.5                                         | 22.6        | 16.2      | 514                                       | 500         | 535        |
| <b>Average of above</b>   | <b>15</b>                                    | <b>16</b>   | <b>15</b> | <b>500</b>                                | <b>525</b>  | <b>529</b> |
| <b>Standard deviation</b> |                                              |             |           | <b>100</b>                                | <b>95</b>   | <b>96</b>  |

*Notes:*

– The country did not participate in that part of the study.

n.a.: not available.

\* Countries did not satisfy one or more TIMSS sampling guidelines. Since sampling imperfections may have affected the estimation of the percentage of under-achievers, the values are presented in brackets.

1. Population II, 14-year-olds, for reading. 8th grade students with a majority of 13-year-olds for mathematics and science. 7th grade students for Denmark.

2. Students scoring more than one standard deviation below the mean score of the OECD countries who participated in the IEA studies. The international mean for reading was 500 points, for mathematics 525 points and for science 529 points. For most countries, standard errors of the estimates are given in *Education at a Glance: OECD Indicators*, 1994 and 1997 editions.

3. Germany TFGDR refers to the territory of the former Democratic Republic. FTFR refers to the former territory of the Federal Republic.

Sources: IEA, *Reading Literacy Study* and IEA, *Third International Mathematics and Science Study*, cited in OECD (1997a), p. 109.

### Ranges of achievement among 13-14 year-old students<sup>1</sup> in reading<sup>2</sup> (1991), and mathematics<sup>3</sup> and science<sup>4</sup> (1994-1995)

Lower and upper quartiles, relative to international mean, in equivalent years' progress  
(Data for Figure 2)

|                         | Inter-quartile range<br>(in points) for: |            |            | Inter-quartile range<br>(in equivalent years'<br>progress) for: |            |            | 25th percentile<br>(in points) for: |            |            | 75th percentile<br>(in points) for: |            |            | 25th percentile minus<br>international mean<br>(in equivalent years'<br>progress) for: |             |             | 75th percentile minus<br>international mean<br>(in equivalent years'<br>progress) for: |            |            |
|-------------------------|------------------------------------------|------------|------------|-----------------------------------------------------------------|------------|------------|-------------------------------------|------------|------------|-------------------------------------|------------|------------|----------------------------------------------------------------------------------------|-------------|-------------|----------------------------------------------------------------------------------------|------------|------------|
|                         | Reading                                  | Maths      | Science    | Reading                                                         | Maths      | Science    | Reading                             | Maths      | Science    | Reading                             | Maths      | Science    | Reading                                                                                | Maths       | Science     | Reading                                                                                | Maths      | Science    |
| Australia*              | –                                        | 140        | 144        | –                                                               | 4.2        | 3.6        | –                                   | 460        | 475        | –                                   | 600        | 619        | –                                                                                      | –2.1        | –1.7        | –                                                                                      | 2.4        | 2.9        |
| Austria*                | –                                        | 134        | 124        | –                                                               | 4.1        | 3.1        | –                                   | 474        | 499        | –                                   | 608        | 623        | –                                                                                      | –1.6        | –1.0        | –                                                                                      | 2.7        | 3.0        |
| Belgium                 |                                          |            |            |                                                                 |            |            |                                     |            |            |                                     |            |            |                                                                                        |             |             |                                                                                        |            |            |
| Flemish community       | –                                        | 129        | 110        | –                                                               | 3.9        | 2.8        | –                                   | 502        | 499        | –                                   | 631        | 609        | –                                                                                      | –0.7        | –1.0        | –                                                                                      | 3.4        | 2.6        |
| French community*       | 90                                       | 120        | 117        | 2.9                                                             | 3.6        | 2.9        | 447                                 | 467        | 415        | 537                                 | 587        | 532        | –1.7                                                                                   | –1.9        | –3.7        | 1.2                                                                                    | 2.0        | 0.1        |
| Canada                  | –                                        | 119        | 122        | –                                                               | 3.6        | 3.1        | –                                   | 468        | 472        | –                                   | 587        | 594        | –                                                                                      | –1.8        | –1.8        | –                                                                                      | 2.0        | 2.1        |
| British Columbia        | 109                                      | –          | –          | 3.5                                                             | –          | –          | 468                                 | –          | –          | 577                                 | –          | –          | –1.0                                                                                   | –           | –           | 2.5                                                                                    | –          | –          |
| Czech Republic          | –                                        | 137        | 121        | –                                                               | 4.2        | 3.0        | –                                   | 496        | 513        | –                                   | 633        | 634        | –                                                                                      | –0.9        | –0.5        | –                                                                                      | 3.5        | 3.4        |
| Denmark*                | n.a.                                     | 118        | 118        | n.a.                                                            | 3.6        | 3.0        | n.a.                                | 443        | 423        | n.a.                                | 561        | 541        | n.a.                                                                                   | –2.6        | –3.4        | n.a.                                                                                   | 1.2        | 0.4        |
| Finland                 | 88                                       | –          | –          | 2.8                                                             | –          | –          | 517                                 | –          | –          | 605                                 | –          | –          | 0.5                                                                                    | –           | –           | 3.4                                                                                    | –          | –          |
| France                  | 91                                       | 107        | 107        | 2.9                                                             | 3.2        | 2.7        | 500                                 | 484        | 446        | 591                                 | 591        | 553        | 0.0                                                                                    | –1.3        | –2.7        | 2.9                                                                                    | 2.1        | 0.8        |
| Germany* <sup>5</sup>   | –                                        | 124        | 139        | –                                                               | 3.8        | 3.5        | –                                   | 448        | 463        | –                                   | 572        | 602        | –                                                                                      | –2.5        | –2.1        | –                                                                                      | 1.5        | 2.4        |
| TFGDR                   | 110                                      | –          | –          | 3.5                                                             | –          | –          | 470                                 | –          | –          | 580                                 | –          | –          | –1.0                                                                                   | –           | –           | 2.6                                                                                    | –          | –          |
| FTFR                    | 95                                       | –          | –          | 3.1                                                             | –          | –          | 473                                 | –          | –          | 569                                 | –          | –          | –0.9                                                                                   | –           | –           | 2.2                                                                                    | –          | –          |
| Greece*                 | 87                                       | 124        | 118        | 2.8                                                             | 3.8        | 3.0        | 467                                 | 422        | 439        | 554                                 | 546        | 557        | –1.1                                                                                   | –3.3        | –2.9        | 1.7                                                                                    | 0.7        | 0.9        |
| Hungary                 | 100                                      | 131        | 119        | 3.2                                                             | 4.0        | 3.0        | 488                                 | 471        | 497        | 588                                 | 602        | 616        | –0.4                                                                                   | –1.7        | –1.0        | 2.8                                                                                    | 2.5        | 2.8        |
| Iceland                 | 107                                      | 105        | 113        | 3.5                                                             | 3.2        | 2.8        | 485                                 | 435        | 442        | 592                                 | 540        | 555        | –0.5                                                                                   | –2.9        | –2.8        | 3.0                                                                                    | 0.5        | 0.8        |
| Ireland                 | 102                                      | 132        | 134        | 3.3                                                             | 4.0        | 3.4        | 467                                 | 462        | 471        | 569                                 | 594        | 605        | –1.1                                                                                   | –2.0        | –1.9        | 2.2                                                                                    | 2.2        | 2.5        |
| Italy                   | 99                                       | –          | –          | 3.2                                                             | –          | –          | 467                                 | –          | –          | 566                                 | –          | –          | –1.1                                                                                   | –           | –           | 2.1                                                                                    | –          | –          |
| Japan                   | –                                        | 140        | 118        | –                                                               | 4.2        | 3.0        | –                                   | 536        | 514        | –                                   | 676        | 632        | –                                                                                      | 0.4         | –0.5        | –                                                                                      | 4.9        | 3.3        |
| Korea                   | –                                        | 142        | 125        | –                                                               | 4.3        | 3.1        | –                                   | 540        | 504        | –                                   | 682        | 629        | –                                                                                      | 0.5         | –0.8        | –                                                                                      | 5.1        | 3.2        |
| Netherlands*            | 94                                       | 127        | 114        | 3.0                                                             | 3.8        | 2.9        | 472                                 | 477        | 505        | 566                                 | 604        | 619        | –0.9                                                                                   | –1.5        | –0.8        | 2.1                                                                                    | 2.5        | 2.9        |
| New Zealand             | 136                                      | 127        | 136        | 4.4                                                             | 3.8        | 3.4        | 485                                 | 443        | 458        | 621                                 | 570        | 594        | –0.5                                                                                   | –2.6        | –2.3        | 3.9                                                                                    | 1.5        | 2.1        |
| Norway                  | 90                                       | 115        | 118        | 2.9                                                             | 3.5        | 3.0        | 473                                 | 445        | 470        | 563                                 | 560        | 588        | –0.9                                                                                   | –2.6        | –1.9        | 2.0                                                                                    | 1.1        | 1.9        |
| Portugal                | 73                                       | 84         | 102        | 2.4                                                             | 2.5        | 2.6        | 485                                 | 411        | 429        | 559                                 | 495        | 531        | –0.5                                                                                   | –3.7        | –3.2        | 1.9                                                                                    | –1.0       | 0.1        |
| Spain                   | 87                                       | 100        | 106        | 2.8                                                             | 3.0        | 2.7        | 451                                 | 436        | 465        | 539                                 | 536        | 571        | –1.6                                                                                   | –2.9        | –2.1        | 1.3                                                                                    | 0.4        | 1.4        |
| Sweden                  | 107                                      | 119        | 122        | 3.5                                                             | 3.6        | 3.1        | 493                                 | 460        | 476        | 600                                 | 579        | 598        | –0.2                                                                                   | –2.1        | –1.7        | 3.2                                                                                    | 1.7        | 2.2        |
| Switzerland             | 98                                       | 122        | 127        | 3.2                                                             | 3.7        | 3.2        | 494                                 | 485        | 460        | 592                                 | 607        | 587        | –0.2                                                                                   | –1.3        | –2.2        | 3.0                                                                                    | 2.6        | 1.9        |
| United Kingdom          |                                          |            |            |                                                                 |            |            |                                     |            |            |                                     |            |            |                                                                                        |             |             |                                                                                        |            |            |
| England                 | –                                        | 127        | 141        | –                                                               | 3.8        | 3.5        | –                                   | 443        | 484        | –                                   | 570        | 625        | –                                                                                      | –2.6        | –1.5        | –                                                                                      | 1.5        | 3.1        |
| Scotland*               | –                                        | 123        | 133        | –                                                               | 3.7        | 3.3        | –                                   | 436        | 451        | –                                   | 559        | 584        | –                                                                                      | –2.9        | –2.5        | –                                                                                      | 1.1        | 1.8        |
| United States           | 126                                      | 128        | 143        | 4.1                                                             | 3.9        | 3.6        | 477                                 | 435        | 465        | 603                                 | 563        | 608        | –0.7                                                                                   | –2.9        | –2.1        | 3.3                                                                                    | 1.2        | 2.5        |
| <b>Average of above</b> | <b>99</b>                                | <b>123</b> | <b>123</b> | <b>3.2</b>                                                      | <b>3.7</b> | <b>3.1</b> | <b>478</b>                          | <b>463</b> | <b>469</b> | <b>577</b>                          | <b>586</b> | <b>592</b> | <b>–0.7</b>                                                                            | <b>–2.0</b> | <b>–1.9</b> | <b>2.5</b>                                                                             | <b>2.0</b> | <b>2.0</b> |

#### Notes:

– The country did not participate in that part of the study. n.a.: not available.

\* Countries did not satisfy one or more TIMSS sampling guidelines. Since sampling imperfections may have affected the estimation of the percentage of under-achievers, the values are presented in brackets.

1. Population II, 14-year-olds, for reading, 8th grade students with a majority of 13-year-olds for mathematics and science. 7th grade students for Denmark.

2. The average difference registered between the reading scores of the 9-year-old and the 14-year-old samples tested is 155 points. The average progress in reading in a school year is estimated to be around 31 points. On this basis, one can consider that the gap between the 25th and the 75th percentile of 14-year-old students is the equivalent of approximately two years of schooling in Portugal, and around four years in New Zealand.

3. The average difference registered between the scores in mathematics of the 7th and 8th grade samples tested is 33 points. On this basis, one can consider that the gap observed in the 8th grade between the 25th and the 75th percentile of the students is the equivalent of approximately four years of schooling in Korea, and two years and a half in Portugal.

4. The average difference registered between the scores in science of the 7th and 8th grade samples tested is 40 points. On this basis, one can consider that the gap observed in the 8th grade between the 25th and the 75th percentile of the students is the equivalent of approximately three years and a half of schooling in Australia and two years and a half in Portugal.

5. Germany TFGDR refers to the territory of the former Democratic Republic. FTFR refers to the former territory of the Federal Republic.

Source: IEA, *Reading Literacy Study* and IEA, *Third International Mathematics and Science Study*, cited in OECD (1997a), p. 110.

**Percentage of boys scoring “lowest” in reading (1991), mathematics and science (1994-1995)***(Data for Figure 3a)*

|                             | Reading sample                                      |                    | Mathematics and science sample                    |                                                      |                    |
|-----------------------------|-----------------------------------------------------|--------------------|---------------------------------------------------|------------------------------------------------------|--------------------|
|                             | Among students scoring at the bottom 15% in reading | Among all students | Among students scoring at the bottom 15% in maths | Among students scoring at the bottom 15% in sciences | Among all students |
| Australia                   | —                                                   | —                  | 55.4                                              | 50.5                                                 | 50.2               |
| Austria                     | —                                                   | —                  | 47.3                                              | 40.9                                                 | 50.0               |
| Belgium (Flemish community) | —                                                   | —                  | 49.2                                              | 46.8                                                 | 50.0               |
| Belgium (French community)  | 52.6                                                | 51.9               | 48.9                                              | 44.0                                                 | 49.6               |
| Canada <sup>1</sup>         | 62.9                                                | 50.1               | 56.3                                              | 47.9                                                 | 50.3               |
| Czech Republic              | —                                                   | —                  | 46.0                                              | 41.8                                                 | 51.0               |
| Denmark                     | n.a.                                                | n.a.               | 43.2                                              | 40.5                                                 | 49.7               |
| England                     | —                                                   | —                  | 55.2                                              | 46.8                                                 | 52.4               |
| Finland                     | 61.9                                                | 49.8               | —                                                 | —                                                    | —                  |
| France                      | 49.0                                                | 44.1               | 45.1                                              | 41.1                                                 | 50.5               |
| Germany <sup>2</sup>        | —                                                   | —                  | 48.4                                              | 44.4                                                 | 49.3               |
| FTFR                        | 55.2                                                | 50.9               | —                                                 | —                                                    | —                  |
| TFGDR                       | 57.3                                                | 47.9               | —                                                 | —                                                    | —                  |
| Greece                      | 52.8                                                | 48.5               | 49.9                                              | 46.6                                                 | 51.8               |
| Hungary                     | 58.9                                                | 47.8               | 49.8                                              | 41.3                                                 | 49.2               |
| Iceland                     | 57.1                                                | 50.1               | 47.8                                              | 47.0                                                 | 51.3               |
| Ireland                     | 67.8                                                | 51.0               | 47.3                                              | 50.2                                                 | 49.7               |
| Italy                       | 60.7                                                | 48.9               | —                                                 | —                                                    | —                  |
| Japan                       | —                                                   | —                  | 53.1                                              | 46.4                                                 | 51.7               |
| Korea                       | —                                                   | —                  | 48.6                                              | 44.0                                                 | 54.8               |
| Netherlands                 | 61.2                                                | 51.7               | 47.1                                              | 42.6                                                 | 49.9               |
| New Zealand                 | 54.7                                                | 48.7               | 50.4                                              | 48.3                                                 | 52.1               |
| Norway                      | 54.6                                                | 49.4               | 49.1                                              | 48.4                                                 | 49.8               |
| Portugal                    | 41.4                                                | 47.2               | 44.7                                              | 36.4                                                 | 50.8               |
| Scotland                    | —                                                   | —                  | 45.5                                              | 43.6                                                 | 52.3               |
| Spain                       | 51.0                                                | 48.1               | 45.6                                              | 37.7                                                 | 49.0               |
| Sweden                      | 61.6                                                | 49.7               | 49.4                                              | 45.7                                                 | 51.2               |
| Switzerland                 | 57.0                                                | 49.3               | 52.4                                              | 49.1                                                 | 51.5               |
| United States               | 58.1                                                | 48.8               | 51.3                                              | 51.3                                                 | 50.7               |

**Notes:**

— The country did not participate in that part of the study.

n.a. not available.

1. Only British Columbia for Reading Literacy.

2. Germany TFGDR refers to the territory of the former Democratic Republic. FTFR refers to the former territory of the Federal Republic.

*Sources:* IEA, *Reading Literacy, Population II* (“14 year-olds”), 1991; *Third International Mathematics and Science Study*, 1995.

**Percentage of students speaking a language at home other than the language of instruction<sup>1</sup> scoring “lowest” in reading (1991), mathematics and science (1994-1995)**

(Data for Figure 3b)

|                             | Reading sample <sup>2</sup>                         |                    | Mathematics and science sample <sup>2</sup>       |                                                      |                    |
|-----------------------------|-----------------------------------------------------|--------------------|---------------------------------------------------|------------------------------------------------------|--------------------|
|                             | Among students scoring at the bottom 15% in reading | Among all students | Among students scoring at the bottom 15% in maths | Among students scoring at the bottom 15% in sciences | Among all students |
| Australia                   | —                                                   | —                  | 14.7                                              | 15.1                                                 | 8.8                |
| Austria                     | —                                                   | —                  | 23.5                                              | 25.9                                                 | 12.8               |
| Belgium (Flemish community) | —                                                   | —                  | 17.8                                              | 20.3                                                 | 13.3               |
| Belgium (French community)  | 18.2                                                | 6.9                | 21.9                                              | 19.5                                                 | 9.9                |
| Canada <sup>3</sup>         | 10.4                                                | 7.1                | 16.6                                              | 24.1                                                 | 10.3               |
| Czech Republic              |                                                     |                    | 3.0                                               | 2.6                                                  | 1.2                |
| Denmark                     | n.a.                                                | n.a.               | 12.2                                              | 15.4                                                 | 6.6                |
| England                     |                                                     |                    | 6.0                                               | 6.0                                                  | 3.6                |
| France                      | 8.1                                                 | 3.2                | 9.2                                               | 10.7                                                 | 5.9                |
| Germany <sup>4</sup>        |                                                     |                    | 28.9                                              | 30.9                                                 | 15.0               |
| FTFR                        | 28.9                                                | 5.1                | —                                                 | —                                                    | —                  |
| FTDR                        | 1.0                                                 | 0.8                | —                                                 | —                                                    | —                  |
| Greece                      | 4.2                                                 | 2.6                | 8.0                                               | 8.1                                                  | 4.6                |
| Hungary                     | 0.9                                                 | 0.5                | 4.0                                               | 3.2                                                  | 1.4                |
| Iceland                     | 1.0                                                 | 0.3                | 5.1                                               | 4.6                                                  | 3.8                |
| Ireland                     | 2.7                                                 | 0.9                | 4.1                                               | 4.2                                                  | 2.3                |
| Korea                       | —                                                   | —                  | 6.3                                               | 7.0                                                  | 3.7                |
| Netherlands                 | 16.0                                                | 7.8                | 11.1                                              | 11.0                                                 | 8.9                |
| New Zealand                 | 16.8                                                | 3.4                | 15.6                                              | 19.7                                                 | 9.1                |
| Norway                      | 5.0                                                 | 1.4                | 11.8                                              | 13.8                                                 | 6.1                |
| Portugal                    | 2.5                                                 | 1.4                | 2.7                                               | 2.7                                                  | 2.2                |
| Scotland                    | —                                                   | —                  | 12.5                                              | 14.3                                                 | 6.1                |
| Spain                       | n.a.                                                | n.a.               | 23.6                                              | 22.7                                                 | 20.4               |
| Sweden                      | 12.2                                                | 3.9                | 15.7                                              | 18.3                                                 | 6.6                |
| Switzerland                 | n.a.                                                | n.a.               | 43.3                                              | 41.5                                                 | 19.8               |
| United States               | 8.6                                                 | 2.9                | 20.2                                              | 22.6                                                 | 9.8                |

*Notes:*

— The country did not participate in that part of the study.

n.a. not available.

1. The fact of speaking another language than that of the test does not necessarily correspond to membership in an immigrated minority. In Italy, in Spain and in Switzerland, most of these students speak a dialect or an official language different from the language of instruction. Figures relating to this variable have been deleted for these three countries, where they reflect linguistic situations hardly comparable to those of the other countries. In Finland, the students in Swedish-language schools have not been included in the IEA sample. The figure for this country is therefore also considered unavailable.
2. The percentage of students speaking a language at home other than the language of instruction could not be calculated in the same way for Reading Literacy and TIMSS, due to differences in the questionnaires. Therefore the data are not comparable across the Reading sample, and the Mathematics and Science sample. International Mathematics and Science Study, 1995.
3. Only British Columbia for reading literacy.
4. Germany TFGDR refers to the territory of the former Democratic Republic. FTFR refers to the former territory of the Federal Republic.

Source: IEA, *Reading Literacy*, Population II (“14 year-olds”), 1991; *Third International Mathematics and Science Study*, 1995.

**Handicap of students older than the norm<sup>1</sup>**

Difference from national mean, on index from –1 to 0  
(Data for Figure 4)

|                         | Percentage of “over-aged” students <sup>1</sup><br>in RL sample | Reading handicap<br>of the “over-aged”<br>students <sup>2</sup> | Percentage of “over-aged” students <sup>3</sup><br>in TIMSS sample | Mathematic handicap<br>of the “over-aged”<br>students <sup>2</sup> | Science handicap<br>of the “over-aged”<br>students <sup>2</sup> |
|-------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------|
| Australia*              | –                                                               | –                                                               | 13.8                                                               | –0.045                                                             | –0.043                                                          |
| Austria*                | –                                                               | –                                                               | 12.7                                                               | –0.582                                                             | –0.491                                                          |
| Belgium                 |                                                                 |                                                                 |                                                                    |                                                                    |                                                                 |
| Flemish community       | –                                                               | –                                                               | 17.4                                                               | –0.858                                                             | –0.626                                                          |
| French community*       | 33.4                                                            | –0.713                                                          | 24.0                                                               | –0.858                                                             | –0.618                                                          |
| Canada                  | –                                                               | –                                                               | 13.1                                                               | –0.431                                                             | –0.514                                                          |
| British Columbia        | 10.6                                                            | –0.786                                                          | –                                                                  | –                                                                  | –                                                               |
| Czech Republic          | –                                                               | –                                                               | 8.9                                                                | –0.855                                                             | –0.645                                                          |
| Denmark*                | n.a.                                                            | n.a.                                                            | 7.3                                                                | –0.594                                                             | –0.406                                                          |
| Finland                 | 1.2                                                             | (–1.100)                                                        | –                                                                  | –                                                                  | –                                                               |
| France                  | 28.4                                                            | –0.730                                                          | 24.2                                                               | –0.622                                                             | –0.426                                                          |
| Germany* <sup>4</sup>   | –                                                               | –                                                               | 16.8                                                               | –0.487                                                             | –0.439                                                          |
| TFGDR                   | 4.1                                                             | (–0.904)                                                        | –                                                                  | –                                                                  | –                                                               |
| FTFR                    | 17.1                                                            | –0.634                                                          | –                                                                  | –                                                                  | –                                                               |
| Greece*                 | 7.4                                                             | –0.735                                                          | 10.4                                                               | –0.752                                                             | –0.565                                                          |
| Hungary                 | 7.5                                                             | –0.994                                                          | 10.5                                                               | –0.980                                                             | –0.749                                                          |
| Iceland                 | 0.8                                                             | (–1.572)                                                        | 0.6                                                                | (–1.104)                                                           | (–0.877)                                                        |
| Ireland                 | 13.2                                                            | –0.563                                                          | 12.7                                                               | –0.493                                                             | –0.322                                                          |
| Italy                   | 16.1                                                            | –0.674                                                          | –                                                                  | –                                                                  | –                                                               |
| Japan                   | –                                                               | –                                                               | 0.1                                                                | (–0.498)                                                           | (–0.810)                                                        |
| Korea                   | –                                                               | –                                                               | 4.0                                                                | (–0.555)                                                           | (–0.408)                                                        |
| Netherlands*            | 17.6                                                            | –0.573                                                          | 18.6                                                               | –0.607                                                             | –0.416                                                          |
| New Zealand             | 4.6                                                             | (–1.004)                                                        | 8.2                                                                | –0.430                                                             | –0.370                                                          |
| Norway                  | 3.5                                                             | (–0.743)                                                        | 2.1                                                                | (–0.486)                                                           | (–0.711)                                                        |
| Portugal                | 34.1                                                            | –0.495                                                          | 25.1                                                               | –0.544                                                             | –0.439                                                          |
| Spain                   | 19.8                                                            | –0.717                                                          | 20.3                                                               | –0.625                                                             | –0.378                                                          |
| Sweden                  | 2.0                                                             | (–0.931)                                                        | 3.3                                                                | (–0.872)                                                           | –0.685                                                          |
| Switzerland             | 19.3                                                            | –0.441                                                          | 17.6                                                               | –0.549                                                             | –0.459                                                          |
| United Kingdom          |                                                                 |                                                                 |                                                                    |                                                                    |                                                                 |
| England                 | –                                                               | –                                                               | 1.0                                                                | (–0.261)                                                           | (–0.040)                                                        |
| Scotland*               | –                                                               | –                                                               | 3.6                                                                | (–0.401)                                                           | (–0.417)                                                        |
| United States           | 17.4                                                            | –0.852                                                          | 14.8                                                               | –0.569                                                             | –0.431                                                          |
| <b>Average of above</b> | <b>13.6</b>                                                     | <b>–0.725</b>                                                   | <b>11.8</b>                                                        | <b>–0.605</b>                                                      | <b>–0.475</b>                                                   |

**Notes:**

– The country did not participate in that part of the study.

n.a. not available.

\* Countries did not satisfy one or more TIMSS sampling guidelines.

1. Student at least 8 months older than the average age in the grade concerned.

2. The handicap of over-aged students is the standardised difference between their average scores and the average scores of normal aged students. This estimate is not sufficiently reliable when the group of over-aged students is very small (less than 5 per cent). In such cases the results are given in parentheses.

3. Students at least 6 months older than the mean of the grade. The over-aged students could not be defined in the same way for both studies due to the difference in the design of the studies.

4. Germany TFGDR refers to the territory of the former Democratic Republic. FTFR refers to the former territory of the Federal Republic.

Sources: IEA, *Reading Literacy Study* and IEA, *Third International Mathematics and Science Study*, cited in OECD (1997a), p. 112.

**Students not enrolled<sup>1, 2</sup> (1995)**

Percentage of the relevant age group  
(Data for Figure 5)

|                          | Final legal compulsory schooling age | Typical graduation age, upper secondary | Not enrolled at:                 |             |                                            |
|--------------------------|--------------------------------------|-----------------------------------------|----------------------------------|-------------|--------------------------------------------|
|                          |                                      |                                         | Final legal compulsory schooling | Age 17      | At typical graduation age, upper secondary |
| Australia                | 15                                   | 19                                      | 1.9                              | 6.5         | 47.2                                       |
| Austria                  | 17                                   | 17-19                                   | 12.3                             | 12.3        | 38.3                                       |
| Belgium <sup>3</sup>     | 18                                   | 18-20                                   | 12.5                             | -0.1        | 22.9                                       |
| Canada                   | 16                                   | 18                                      | 6.0                              | 20.9        | 38.1                                       |
| Czech Republic           | 15                                   | 18-19                                   | 1.3                              | 28.3        | 66.0                                       |
| Denmark                  | 16                                   | 19-22                                   | 6.2                              | 18.3        | 54.4                                       |
| Finland                  | 16                                   | 19                                      | 7.4                              | 9.5         | 58.5                                       |
| France                   | 16                                   | 18-20                                   | 3.9                              | 7.4         | 30.2                                       |
| Germany <sup>3</sup>     | 18                                   | 19                                      | 15.7                             | 6.4         | 34.6                                       |
| Greece                   | 14.5                                 | 18-19                                   | 11.4                             | 44.2        | 53.6                                       |
| Hungary                  | 16                                   | 17-18                                   | 11.8                             | 28.9        | 41.3                                       |
| Ireland                  | 15                                   | 17-18                                   | 4.4                              | 19.1        | 22.9                                       |
| Japan <sup>4</sup>       | 15                                   | 18                                      | -1.2                             | 5.6         | -                                          |
| Korea                    | 14                                   | 18                                      | 1.4                              | 10.4        | 45.9                                       |
| Luxembourg <sup>5</sup>  | 15                                   | 18-19                                   | 20.1                             | 22.3        | -                                          |
| Mexico                   | 15                                   | 18                                      | 48.0                             | 63.0        | 75.3                                       |
| Netherlands <sup>3</sup> | 18                                   | 18-19                                   | 17.5                             | 6.7         | 23.7                                       |
| New Zealand              | 16                                   | 18                                      | 0.1                              | 23.2        | 43.4                                       |
| Norway                   | 16                                   | 19                                      | 5.0                              | 9.7         | 50.8                                       |
| Portugal                 | 14                                   | 18                                      | 10.7                             | 27.2        | 44.6                                       |
| Spain                    | 16                                   | 16-18                                   | 17.3                             | 25.2        | 27.2                                       |
| Sweden                   | 16                                   | 19                                      | 3.0                              | 4.2         | 64.7                                       |
| Switzerland              | 15                                   | 18-20                                   | 2.5                              | 16.5        | 44.6                                       |
| Turkey                   | 14                                   | 17                                      | 44.3                             | 74.3        | 74.3                                       |
| United Kingdom           | 16                                   | 16-18                                   | 13.1                             | 25.3        | 29.8                                       |
| United States            | 17                                   | 18                                      | 21.4                             | 21.4        | 44.4                                       |
| <b>Average of above</b>  | <b>15-16</b>                         | <b>18-19</b>                            | <b>11.5</b>                      | <b>20.6</b> | <b>44.9</b>                                |

*Notes:*

– Missing value, or category not applicable.

1. Data refer to full and part-time enrolments in all levels and types of education, attending both public and private institutions.

2. Net enrolment rates for 17-year-olds.

3. Full-time compulsory schooling lasts until age 15 or 16; after that schooling is compulsory on a part-time basis until age 18.

4. Underestimated. Data for tertiary levels are missing.

5. Net enrolment rates by single year of age are underestimated since they only include those students who attend a public or publicly funded school in Luxembourg. Students who are residents of Luxembourg but attend either a not publicly funded school in Luxembourg or a school in a neighbouring country are excluded.

Source: OECD Education Database, cited in OECD (1997a), p. 112.

**Ratio of upper secondary graduates to population at typical age of graduation (times 100)  
by type of programme (1995)**

First educational programmes  
(Data for Figure 6)

|                                          | Total     |           |           | General   |           |           | Vocational and apprenticeship |           |           |
|------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------------|-----------|-----------|
|                                          | M + W     | Men       | Women     | M + W     | Men       | Women     | M + W                         | Men       | Women     |
| Australia                                | —         | —         | —         | 65        | 59        | 71        | —                             | —         | —         |
| Belgium (Flemish community) <sup>1</sup> | 110       | 95        | 117       | 33        | 29        | 38        | 76                            | 70        | 82        |
| Canada                                   | 72        | 68        | 75        | 72        | 68        | 75        | —                             | —         | —         |
| Czech Republic                           | 78        | 79        | 77        | 10        | 8         | 13        | 68                            | 71        | 64        |
| Denmark                                  | 81        | 76        | 87        | 46        | 38        | 54        | 36                            | 38        | 33        |
| Finland                                  | 102       | 95        | 110       | 47        | 39        | 55        | 55                            | 55        | 54        |
| France                                   | 87        | 86        | 89        | 38        | 32        | 44        | 49                            | 53        | 45        |
| Germany                                  | 88        | 89        | 87        | 24        | 22        | 27        | 64                            | 67        | 60        |
| Greece                                   | 80        | 75        | 84        | 51        | 43        | 59        | 28                            | 32        | 25        |
| Hungary <sup>2</sup>                     | 76        | 86        | 88        | 17        | 17        | 27        | 58                            | 66        | 59        |
| Ireland                                  | 94        | 87        | 101       | 89        | 83        | 96        | 5                             | 5         | 5         |
| Italy                                    | 67        | 64        | 70        | 18        | 15        | 20        | 48                            | 48        | 49        |
| Japan                                    | 94        | 91        | 98        | 69        | 66        | 73        | 25                            | 25        | 25        |
| Korea                                    | 85        | 86        | 85        | 50        | 54        | 46        | 35                            | 32        | 39        |
| Mexico                                   | 26        | —         | —         | 22        | —         | —         | 4                             | —         | —         |
| Netherlands                              | 80        | —         | —         | 32        | —         | —         | 46                            | —         | —         |
| New Zealand                              | 95        | 87        | 103       | 65        | 61        | 70        | 30                            | 26        | 34        |
| Norway                                   | 106       | 123       | 88        | 44        | 38        | 50        | 62                            | 85        | 38        |
| Spain                                    | 73        | 65        | 81        | 46        | 40        | 52        | 26                            | 24        | 29        |
| Sweden <sup>3</sup>                      | 64        | 60        | 68        | 25        | 18        | 34        | 38                            | 42        | 33        |
| Switzerland                              | 79        | 84        | 75        | 19        | 16        | 21        | 61                            | 68        | 54        |
| Turkey                                   | 37        | 43        | 31        | 22        | 24        | 20        | 16                            | 19        | 12        |
| United States                            | 76        | 71        | 81        | 76        | 71        | 81        | —                             | —         | —         |
| <b>Country mean</b>                      | <b>80</b> | <b>80</b> | <b>85</b> | <b>43</b> | <b>40</b> | <b>49</b> | <b>41</b>                     | <b>46</b> | <b>41</b> |

*Notes:*

— missing value or data included in another category.

1. Graduation rates obtained are subject to bias for three reasons: *i*) presence of double counting, particularly for part-time programmes; *ii*) diplomas in part-time programmes are awarded to students whose age is much higher than the typical age; and *iii*) many diplomas are awarded to students aged over 18 or 19 years.
2. The number of upper secondary graduates includes all those in the last year of study. As a consequence, the number of graduates is overestimated because of double counting of repeaters and inclusion of those students who fail.
3. The number of graduates has decreased. Since 1995, all educational programmes (both vocational and general) have lasted for 3 years instead of 2. Because of this, 18 year-old students did not graduate in 1995 but stayed enrolled and graduated in the following year. This mainly affects vocational programmes.

Source: OECD (1997a), p. 114.

**Percentage of population aged 16-25, 46-55 and 16-65 at each document literacy level (1994-1995)***(Data for Figure 7)*

|                            | Age   | Level 1 | Level 2 | Level 3 | Level 4/5 |
|----------------------------|-------|---------|---------|---------|-----------|
| Australia                  | 16-25 | 9.7     | 28.4    | 42.6    | 19.2      |
|                            | 46-55 | 23.6    | 27.5    | 34.3    | 14.5      |
|                            | 16-65 | 17.0    | 27.8    | 37.7    | 17.4      |
| Belgium (Flanders)         | 16-25 | 5.8     | 17.8    | 51.4    | 25.0      |
|                            | 46-55 | 20.5    | 27.8    | 41.5    | 10.3      |
|                            | 16-65 | 15.3    | 24.2    | 43.2    | 17.2      |
| Canada                     | 16-25 | 10.4    | 22.3    | 36.4    | 31.0      |
|                            | 46-55 | 23.0    | 31.0    | 23.6    | 22.4      |
|                            | 16-65 | 18.2    | 24.7    | 32.1    | 25.1      |
| Germany                    | 16-25 | 5.2*    | 29.0    | 43.0    | 22.8      |
|                            | 46-55 | 7.4     | 35.0*   | 43.1    | 14.5      |
|                            | 16-65 | 9.0     | 32.7    | 39.5    | 18.9      |
| Ireland                    | 16-25 | 17.0    | 32.9    | 36.9    | 13.2      |
|                            | 46-55 | 36.1    | 29.8    | 24.8    | 9.2       |
|                            | 16-65 | 25.3    | 31.7    | 31.5    | 11.5      |
| Netherlands                | 16-25 | 6.1*    | 16.8    | 51.1    | 26.0      |
|                            | 46-55 | 12.6    | 35.7    | 38.0    | 13.7      |
|                            | 16-65 | 10.1    | 25.7    | 44.2    | 20.0      |
| New Zealand                | 16-25 | 18.3    | 29.2    | 31.9    | 20.6      |
|                            | 46-55 | 22.3    | 32.6    | 28.6    | 16.5      |
|                            | 16-65 | 21.4    | 29.2    | 31.9    | 17.6      |
| Poland                     | 16-25 | 32.2    | 33.1    | 26.2    | 8.5       |
|                            | 46-55 | 55.6    | 27.0    | 13.3    | 4.1*      |
|                            | 16-65 | 45.4    | 30.7    | 18.0    | 5.8       |
| Sweden                     | 16-25 | 3.1*    | 16.6    | 39.6    | 40.7      |
|                            | 46-55 | 6.8     | 19.7    | 43.1    | 30.3      |
|                            | 16-65 | 6.2     | 18.9    | 39.4    | 35.5      |
| Switzerland (French)       | 16-25 | 8.7*    | 24.9    | 40.4    | 26.0      |
|                            | 46-55 | 18.0    | 29.8    | 42.4    | 9.7       |
|                            | 16-65 | 16.2    | 28.8    | 38.9    | 16.0      |
| Switzerland (German)       | 16-25 | 7.1*    | 25.7    | 41.0    | 26.3      |
|                            | 46-55 | 21.0    | 33.8    | 35.0    | 10.2*     |
|                            | 16-65 | 18.1    | 29.1    | 36.6    | 16.1      |
| United Kingdom             | 16-25 | 17.8    | 26.6    | 34.1    | 21.5      |
|                            | 46-55 | 24.5    | 28.2    | 31.1    | 16.2      |
|                            | 16-65 | 23.3    | 27.1    | 30.5    | 19.1      |
| United States <sup>1</sup> | 16-25 | 24.7    | 30.9    | 28.4    | 16.1      |
|                            | 46-55 | 21.4    | 28.2    | 33.2    | 17.3      |
|                            | 16-65 | 23.7    | 25.9    | 31.4    | 19.0      |

*Notes:*

\* Unreliable estimate.

1. Because of a sampling anomaly, IALS data have been substituted for the group aged 16-25.

*Source:* OECD and Statistics Canada (1995), p. 153.

**Literacy performance by highest completed level of education,<sup>1</sup> 16-29 year-olds (1994)**Document scale  
(Data for Figure 8)

|                      | ISCED | Percentage |         |         |           |
|----------------------|-------|------------|---------|---------|-----------|
|                      |       | Level 1    | Level 2 | Level 3 | Level 4/5 |
| Canada               | 0/1/2 | 26.7       | 33.2    | 25.4    | 14.7      |
|                      | 3     | 9.3        | 23.6    | 35.8    | 31.3      |
|                      | 5/6/7 | 1.7        | 10.8    | 36.9    | 50.7      |
| Germany              | 0/1/2 | 4.8        | 40.4    | 40.4    | 14.4      |
|                      | 3     | 4.5        | 17.4    | 43.5    | 34.6      |
|                      | 5/6/7 | 0.0        | *       | *       | *         |
| Netherlands          | 0/1/2 | 12.9       | 28.1    | 43.5    | 15.5      |
|                      | 3     | 1.0        | 12.0    | 56.1    | 30.9      |
|                      | 5/6/7 | 0.8        | 8.8     | 43.0    | 47.4      |
| Poland               | 0/1/2 | 45.1       | 30.4    | 19.5    | 5.0       |
|                      | 3     | 15.2       | 39.4    | 35.1    | 10.3      |
|                      | 5/6/7 | 8.5        | 25.0    | 41.1    | 25.4      |
| Sweden               | 0/1/2 | 6.2        | 16.4    | 47.1    | 30.3      |
|                      | 3     | 2.5        | 16.4    | 38.1    | 43.0      |
|                      | 5/6/7 | 0.0        | 5.8     | 31.3    | 63.0      |
| Switzerland (French) | 0/1/2 | *          | *       | *       | *         |
|                      | 3     | 4.7        | 25.8    | 47.7    | 21.8      |
|                      | 5/6/7 | 1.7        | 8.1     | 48.3    | 41.9      |
| Switzerland (German) | 0/1/2 | *          | *       | *       | *         |
|                      | 3     | 6.1        | 25.4    | 42.1    | 26.3      |
|                      | 5/6/7 | *          | *       | *       | *         |
| United States        | 0/1/2 | 27.7       | 34.9    | 29.8    | 7.7       |
|                      | 3     | 14.4       | 33.7    | 40.9    | 11.0      |
|                      | 5/6/7 | 3.7        | 16.7    | 40.7    | 39.0      |

*Notes:*

\* Sample size is insufficient to permit a reliable estimate.

1. ISCED 0/1/2 refers to lower secondary schooling as the highest completed level.

ISCED 3 refers to completed upper secondary schooling.

ISCED 5/6/7 refers to tertiary education, either of a university or non-university type.

Source: *International Adult Literacy Survey, 1994.*

**Percentage of all 16-35 year-olds in the labour force at low and high literacy levels by labour force status,<sup>1</sup>  
and earnings<sup>2</sup> (1994)**

*(Data for Figure 9)*

|                  |                                     | Document scale          |       |                           |       |
|------------------|-------------------------------------|-------------------------|-------|---------------------------|-------|
|                  |                                     | Levels 1 and 2 combined |       | Levels 3 and 4/5 combined |       |
| Canada           | Unemployed                          | 14.1                    | (2.9) | 6.9                       | (2.4) |
|                  | Employed with low or no income      | 36.0                    | (3.4) | 27.7                      | (2.7) |
|                  | Employed with medium to high income | 37.7                    | (6.1) | 50.0                      | (4.9) |
|                  | Employed (no income information)    | 12.1                    | (4.2) | 15.4                      | (3.1) |
| Ireland          | Unemployed                          | 25.8                    | (4.1) | 11.7                      | (2.2) |
|                  | Employed with low or no income      | 34.9                    | (3.1) | 27.6                      | (3.8) |
|                  | Employed with medium to high income | 31.7                    | (2.1) | 52.0                      | (3.2) |
|                  | Employed (no income information)    | 7.7*                    | (1.7) | 8.7                       | (1.7) |
| Netherlands      | Unemployed                          | 16.2*                   | (2.8) | 5.6                       | (1.0) |
|                  | Employed with low or no income      | 28.7                    | (3.8) | 36.0                      | (1.9) |
|                  | Employed with medium to high income | 43.5                    | (3.0) | 52.8                      | (1.8) |
|                  | Employed (no income information)    | 11.5*                   | (2.0) | 5.6                       | (0.9) |
| United Kingdom   | Unemployed                          | 23.7                    | (2.3) | 8.8                       | (1.5) |
|                  | Employed with low or no income      | 38.1                    | (2.9) | 31.5                      | (2.4) |
|                  | Employed with medium to high income | 36.2                    | (2.5) | 57.8                      | (2.5) |
|                  | Employed (no income information)    | 2.0*                    | (0.6) | 1.9*                      | (0.6) |
| United States    | Unemployed                          | 9.0                     | (1.8) | 4.9*                      | (1.6) |
|                  | Employed with low or no income      | 57.1                    | (3.2) | 49.5                      | (4.0) |
|                  | Employed with medium to high income | 16.1                    | (2.0) | 35.0                      | (3.0) |
|                  | Employed (no income information)    | 17.7                    | (2.6) | 10.6                      | (2.2) |
| Average of above | Unemployed                          | 17.8                    |       | 7.6                       |       |
|                  | Employed with low or no income      | 39.0                    |       | 34.5                      |       |
|                  | Employed with medium to high income | 33.0                    |       | 49.5                      |       |
|                  | Employed (no income information)    | 10.2                    |       | 8.4                       |       |

*Notes:*

\* Sample size is insufficient to obtain a reliable estimate. Standard errors in parentheses.

1. Population excludes those who are students and those not in the labour force.

2. Earnings are deemed "low" for those in the bottom two quintiles of earners, and "medium" to "high" for those in the top three quintiles.

Source: *International Adult Literacy Survey*, cited in OECD (1997a), p. 113.

## POLICIES FOR ADDRESSING FAILURE

OECD Member countries have attempted to address failure through a broad range of policies. The purpose of this chapter is to review selected measures applied in some OECD countries in order to understand the underlying rationales of different approaches. Policies aimed at the system and school levels, as well as various forms of programme assistance are considered. Based on this policy review, a set of general considerations are identified for the development of measures to tackle failure in different national contexts. The discussion which follows draws on five case studies presented in Part 2 of this report. Four of these examine individual countries – Belgium, Canada, Japan and Spain – and the fifth one compares policy practices in Australia, New Zealand and the component parts of the United Kingdom.

### SYSTEMIC REFORM

An apparent initial choice facing policy-makers in dealing with educational failure is whether to tackle it through remedial measures or prevention. Most country policies deliberately designed to combat failure tend to fall into the remedial category. Remedial measures take the form of programmes which can be fairly closely targeted on specific problems or target groups, and are easier to track and evaluate with respect to these targets. Such measures also are more transparent, in the sense that they are seen as attacking the immediate issue. The evident drawback is that they do not prevent failure in the first place and do not address the causes of failure within the system.

It is this latter point which has led to a re-thinking of policy approach. While there has been a tendency to address failure specifically through targeted programmes (for the reasons identified), authorities are giving new attention to action which is systemic in reach and orientation. This approach is a means to tackle those aspects of structures and practices which are not supportive of success for all and, at worst, actually contribute to failure. There

are acknowledged difficulties in this respect with systemic approaches: they may be more expensive, applying to all schools and programmes; and improvements generated through systemic reform may provide the majority of benefits to those young people who are already doing well. Thus, in practice, most countries will use a combination of both approaches.

Improving the quality of initial education, extending compulsory schooling and curriculum reform are three examples of system-level intervention strategies applied in some OECD countries to tackle different manifestations of failure.

### Improving the quality of initial education

Research carried out for the study *Our Children at Risk* (OECD, 1995b) identified differing views from Member countries on the educational benefit of initial schooling, as opposed to the wider social benefits, which are generally recognised and valued. While there is clear evidence that pupils who receive pre-school education start primary school with a discernible advantage over other pupils, it remains a matter of debate as to how long this effect persists. At this early stage of a child's development, however, it may be unrealistic to try and distinguish a distinct educational benefit. Firstly, young children learn in a holistic way, oblivious to the boundaries between education and any other form of achievement. Secondly, education is concerned with more than academic achievement: the acquisition of social, moral and cultural values is generally recognised as being of great importance, and trying to measure the impact of this type of pre-school education into later life is problematic. Thirdly, one of the great gains from the early years of education is the development of aspiration, motivation and self-esteem, which are intangible benefits.

The evidence shows that the early years of schooling – including pre-school education and early intervention programmes at the primary level – are crucial not only for foundation learning,

but also for further learning, especially in the case of disadvantaged children (for a fuller discussion, see OECD, 1995a, Chapter 2 and OECD, 1996a, Chapter 3). Although the provision of early childhood education has increased in most OECD countries, strengthening the knowledge base for this level of schooling is needed in order to meet the expanding demand, while assuring the quality and effectiveness of such programmes. Much more comparative information is required about key policy issues such as the relationship between government agencies in charge of initial schooling and care for young children; special teacher training programmes (initial and in-service); ways for enhancing parental involvement (which has been found to be essential); and appropriate funding mechanisms (a much debated issue in some countries, since it relates to the control and governance of this provision).

### **Extension of compulsory schooling**

High rates of participation in education have made it possible to extend the age for compulsory schooling. Although the upper limit is still 14 years in four OECD Member countries, it has been raised to 15 in nine countries, and to 16 in ten countries; and there are five countries where this limit is higher (17 years in Austria and in the United States, and 18 in Belgium, Germany and the Netherlands).<sup>11</sup> As was shown in Chapter II, even if the proportion of students remaining in school until the age of 17 or 18 exceeds 80 or 90 per cent in countries where the upper limit for compulsory schooling is 16 or below, education systems with a higher upper limit seem to have higher enrolment rates until the end of upper secondary education. Since completion of this level of schooling has become increasingly important for the integration of young people into the labour market, such evidence suggests that the extension of compulsory education might be helpful in addressing the problem of students who leave school before finishing their studies.

### **Curriculum reform**

This manifests itself in a variety of ways, and it is helpful to identify three aspects: content, ethos and structure. Regarding reform of content, one of the more comprehensive examples of this in recent years has been the national curriculum phased in England and Wales, in place since 1988. It was designed as a deliberate response to concerns about school standards, and replaced the previous

sketchy guidelines with detailed programmes of study and attainment targets for all subjects. Substantial curriculum reforms also took place in Finland, Norway, Portugal and Sweden, but these were less detailed, less comprehensive or less rapid, and linked to assessments in different ways. Besides provoking considerable public debate, the curriculum reform in the United Kingdom provided a lesson in the practical difficulties of engineering so wide-ranging a change. The key difficulty was finding time in the school day for all the material which the subject specialists claimed was necessary. The new curriculum was strongly criticised by the teacher unions, who complained of the workload imposed on their members; this conflict ended in industrial action and a considerable slimming down of the curriculum. Despite these difficulties, the most recent annual report of England's chief inspector of schools judged that it was beginning to have an effect in raising standards.

Such a far-reaching exercise will be a relatively rare event in most countries (although a number of east European countries have revised their curricula extensively after the dissolution of the Eastern Block). More common is a limited reform measure addressing a particular subject or theme; for instance, all OECD education systems in recent years have had to accommodate the need to teach information technology. The OECD publication *Changing the Subject* (OECD, 1996b) examines the way in which many countries have altered the teaching of mathematics, technology and science to meet new demands, often impelled by concern about economic competitiveness. But content reform can be expensive. It can be controversial, especially if it affects a culturally sensitive area like language. And it can provide a solution to only a relatively limited range of problems.

A second curricular approach to the problem of failure is a change to the ethos or objectives of the curriculum. A good example of this is the recent attempt to reform the Japanese curriculum, initiated in response to concerns that excessive rigidity, narrowness of curriculum and limited teaching style were demotivating students and even causing some to drop-out of the upper secondary system. The priority in the reform package was to change underlying attitudes about the purpose of education, and so make schools more attractive to students, engaging their enthusiasm and giving them a sense of fulfilment. This required a more open-minded and flexible approach on the part of teachers and

schools to cater for the diversity of students' abilities, interests, concerns and career paths, reinforced by a series of specific measures to broaden curricula, widen learning opportunities and introduce a more participatory approach to lessons. While organisational changes were a part of this package, including the introduction of a new "integrated course" and measures to restrict grade repetition, the key element was a change in the objectives and ethos of the system.

A third curricular response to the problem of low pupil achievement is reform of structure, including the administration of the educational system, examinations and accreditation systems and scholastic structures. This kind of change is familiar to all education systems. Recent examples have been the restructuring of education into "cycles" of learning in the French community of Belgium, France and Spain, and the restructuring of the baccalaureate in France and Spain. The aim of moving into a system of cycles at the primary level, with repetition forbidden except at the end of the cycle, has been to structure the curriculum on the basis of longer units. Children of the same age group may therefore be in different stages of the cycle, which allows for more flexibility in meeting students' needs.

Although this three-fold distinction between different types of curricular reform is helpful for descriptive purposes, when it comes to practical implementation the boundaries are not so clear-cut. *Changing the Subject* mentioned above observes the growing awareness amongst policy-makers of a need to approach such reforms in a holistic way, so that curriculum changes also encompass teacher education, new approaches to student assessment, and new instruction materials.

## SCHOOL-LEVEL INTERVENTION

School-level interventions are based on the premise that schools are responsible for the standards their pupils achieve and are capable of improving them. School improvement has become the main policy focus of measures addressing failure in the component nations of the United Kingdom (although there are considerable differences between the four of these), New Zealand and Australia. The comparative case study on these countries discusses the similarities and differences between them. Some states of the United States and some Canadian provinces have also embraced this approach.

While there is evidence that other factors profoundly affect pupil achievement – prior learning and, above all, social factors – these are difficult for policy-makers to influence (except, as noted, through pre-school education, which however is often more than just an educational service). Policies to improve school effectiveness offer a relatively direct means of affecting pupil outcomes. They also serve the additional purpose of promoting the accountability of educational institutions which, as the OECD study on *Schools under Scrutiny* (OECD, 1995c) observes, is attractive to policy-makers in an age of concern over educational standards and pressures on public budgets.

The ability of schools to make a difference will depend to a considerable extent on the degree of autonomy they enjoy, particularly in financial, staffing and curricular matters.<sup>12</sup> In countries where the focus on school failure is strongest – New Zealand and the United Kingdom – the degree of autonomy is very great, engineered in the former by the abolition of regional education boards, and in the latter by the mandatory delegation of funding and responsibility from local education authorities. It seems likely that the bestowing of greater autonomy on schools will develop in tandem with expectations of greater school accountability. For instance, the recent pilot experiment in Denmark, in which premises and staffing decisions were delegated to seven pilot institutions, required them to demonstrate – in exchange – greater user satisfaction as measured by an external institute.

Although those countries which have pioneered the institutional approach – New Zealand and the component nations of the United Kingdom – have in some cases made provision for dramatic intervention, in practice a spectrum of intervention exists, and the preference has been to rely on a mixture of deterrence, persuasion and support. Common to all of these is the requirement that the school produces an action plan for recovery. In decreasing order of severity, the means of intervention are:

- *School closure.* United Kingdom ministers used their powers to close the one school in England where they intervened, after a review judged it beyond recovery. Similar powers in New Zealand have not yet been used.
- *To take control of the school.* Authority exists in New Zealand for the central government to replace the school board with a single commissioner; in England and Wales, for the appointment of an "education association" (a group of at least five

people) to assume the responsibilities of the school's governing body. In practice, these powers have been used very sparingly: three times in five years in New Zealand, and only once in England. However, the possibility of central government intervention in itself provides a powerful incentive for the school to regenerate itself. In England in particular, ministers have quite explicitly used these powers principally as a deterrent, and have limited themselves to only one (highly publicised) intervention, despite the identification of some 200 "failing schools". The pattern of recovery emerging at these "failing schools" appears to justify this restrained approach. A similar form of intervention exists in the state of Kentucky, where a fall of more than 5 per cent in a school's test results leads to its designation as a school in "in crisis". This triggers the suspension of the tenure of its staff and the appointment of specially trained "Kentucky distinguished educators" who evaluate the staff and decide whether they should remain, be transferred to other schools, or be dismissed.

- *The school is effectively put on probation*, and allowed a chance to improve itself. In New Zealand, an adverse report on a school leads to a warning and return visits by inspectors. In England and Wales, the school is allowed to implement a recovery plan, provided the central government considers the plan adequate. Inspectors return every term to monitor progress. In Kentucky, a fall in test results of less than 5 per cent does not trigger intervention, but an improvement plan must be produced and the school has access to a special school improvement fund.
- *A "quality assurance" model*, as exists in Scotland, where national standards and performance indicators are published by the inspectorate, and a sample of schools are visited each year, leading to a published report with recommendations. There is a repeat visit by inspectors 12 to 18 months later, with further visits if the school causes concern, but no powers of intervention.

The indications are that this type of approach is meeting with success. In New Zealand, the process of warning schools and revisiting them produced improvements at half of the schools identified within six months. In England, by the autumn of 1996, nine "failing schools" had been declared by inspectors to be providing an acceptable standard of education again, and an analysis of inspectors' reports of their monitoring visits to 60 other "failing

schools" showed substantial improvements at 50 of them.

A number of observations need to be made. Firstly, in all these cases the onus for action is very much at school level, particularly with the board of governors that runs the school and with the principal. Secondly, in each of these systems the school is required to produce an improvement plan as a key element in its recovery. Thirdly, in the United Kingdom context, the role of the local authority is important in providing support and advice to the school. In England, local authorities are accorded powers of intervention: to take charge of school staffing and funding, and to appoint extra members of the school's governing body. Indeed, one of the main dynamics of the English system has been strenuous efforts by local authorities to avoid the transfer of schools to "education associations", by helping schools that have failed, and by giving preventative support to avoid school failure in the first place.

Three key elements in a school's recovery have been identified on the basis of experience in England. One is leadership, in particular that of a new head teacher; in half of the "failing schools", the head has been replaced. The second is improvement in teaching quality, usually engineered by the departure of a few staff and intensive in-service training for the rest. Thirdly, the re-creation within the school of a capacity for self-improvement, rather than the dysfunctional relationships or the apathy in the face of adversity which previously characterised many "failing schools".

While the England and New Zealand models seem particularly drastic, it is important to understand that they form part of a more comprehensive package of measures to deal with a range of schools with problems. The New Zealand "Schools Support Project" offers help to schools which might otherwise become at risk of failing by encouraging self-review, establishing help networks, and setting up collaborative school improvement projects with groups of schools. In England, inspectors pay repeat visits to schools which, although not failing, have serious weaknesses, and a much broader "School Improvement Programme" intended to enhance all schools' performance has been launched, based on a system of grants to support school development planning and target-setting.

Although school improvement has been recognised as an important policy issue by all OECD Member countries, some of them favour concentrat-

ing on policies aiming to improve the education system as a whole. In the context of this debate, three tensions have become evident. One is the tension between promoting success through self improvement on the one hand, and inspiring fear through the threat of intervention on the other. Allied to this is the possible tension between a culture of trust implicit in self-improvement, and the element of control that clearly exists in such approaches. A third tension is that between the “top-down” and “bottom up” approaches to improvement.

## PROGRAMME ASSISTANCE

Programmes to overcome educational failure take two main forms: *targeted projects* and *network development*. The former are the traditional response of government to an educational problem through the provision of extra resources for a specific purpose, sometimes made subject to a bidding system, and usually with an evaluation mechanism attached. OECD countries have used such intervention projects at differing levels:

- *Regional*: for example, the 500+ Priority Education Zones (ZEPs) in France, which provide additional staff and remedial measures in areas where social conditions are judged to constitute a “risk factor”.
- *Institutional*: for example, Northern Ireland’s “Raising School Standards Initiative” which has provided extra resources to some 100 schools with particular disadvantages, on condition that they present action plans for their own improvement.
- *Pupil-targeted*: The many examples of this kind of initiative include special measures taken in Ireland and Portugal to help “traveller children”; Australia’s “National Equity Programme for Schools” (NEPS) which, through programmes agreed with education authorities, provides funds for specific “target groups” of pupils at risk of failure, largely because of their social background; and the New Zealand government’s special programmes to meet the special needs of Pacific Island and Maori pupils.

An alternative approach has become popular, however: the network approach. This seems to have been practised quite extensively at the institutional level, with the development of school improvement networks in the US and England, whose establishment has often been facilitated by academic institutions. Increasingly, there are examples of it being used by OECD Member governments. Italy’s “Quality in Schools” initiative is based on networks of

schools organised around a “pivot school” to promote teacher training and reduce schools’ sense of isolation. Local networks of schools are also a component of Australia’s “National Schools Network” and New Zealand’s “Schools Support Project”.

The targeted project approach has obvious advantages for governments. If the problem is an acute one which attracts public attention, a targeted project meets the public demand for the government to do something direct and immediate. “Reading recovery” projects, pioneered in New Zealand, have been adopted in a number of OECD countries under just such political circumstances. Governments can, if they wish, constitute projects so that they can exercise close control over them by attaching conditions to funding. This element of direct control makes it relatively easy to evaluate progress, and to alter or shape the development of the project in the light of experience.

The network approach has the advantage of offering a different mode of involvement to those who deliver the intervention; usually teachers, ancillary pedagogical staff and inspectors. While projects tend to adopt a top-down approach, networks tend to be more collaborative and participative. This makes them particularly valuable for the purpose of professional development, since the fact that teachers particularly value the direct experience of other teachers in similar circumstances is a feature of the teaching profession. By encouraging contact and debate, a network can create a “wave” effect, encouraging subsidiary voluntary activities by participants. The Italian “Quality in Schools” project particularly emphasises the value of the spontaneous participation of schools and its effect on raising the motivation of teachers. This can make networks a cost-effective form of intervention. The drawback to a network approach from the policy-maker’s viewpoint is that it may be less easy to track the activity as it develops, and the internal dynamics of networks can also divert their activities away from the areas on which the programme was designed to concentrate. However, there is some country experience, for example the “Education Priorities Programme” in the Netherlands, where steps have been taken to “steer” networks of schools.

## POLICY IMPLICATIONS: GENERAL CONSIDERATIONS

Many different issues emerge from the preceding analysis of the various forms of intervention attempted in order to address educational failure.

Out of these, some general considerations can be identified for the development of policies in this area. Seven policy considerations are presented: the need to mobilise public support for initiatives against failure; the need to define clearly the responsibility at different levels of the system; the need to address failure in a comprehensive way; the need to create supportive learning environments for low-achievers; the need to support the role of teachers; and, finally, the crucial importance of pedagogy and resources for tackling key aspects of this phenomenon.

### Public awareness needs to be raised

The fate of attempts to address failure will depend, to a considerable extent, on the ability of policy-makers to mobilise public opinion in support of educational reform. It may be, of course, that the climate of opinion favours reform: in the United Kingdom in the mid-1980s, for example, a widespread belief that the education system was under-performing greatly facilitated an extremely far-reaching programme of reforms.

Often, however, public misperception is a barrier to addressing failure at school. This can take various forms, such as cultural attachment to measures of scholastic achievement that mask failure during the schooling process, or to beliefs which reinforce it. Examples of the former are the importance that public opinion in Spain and, even more so, in Japan, attaches to university entrance exams. Examples of the latter arise in countries, such as Belgium, where slow learners repeat one or several years of study, in spite of the evidence that grade repeating has a negative effect on student performance (particularly in the case of disadvantaged students).

While such misperceptions can hinder the implementation of measures to combat educational failure, they can be overcome. Amongst factors which have proved significant in raising awareness of the need for measures of reform are:

- *the findings of a respected inspectorate which informs opinion.* The Academies of France, the Office for Standards in Education in the United Kingdom and the Education Review Office of New Zealand are examples of such institutions;
- *reports of investigative commissions*, such as the Ontario Royal Commission on Learning of 1995 and Japan's National Council on Educational Reform of 1985;

- *public realisation of the economic consequences of failure.* The complaints of employers about the skills of their workforce can be influential in this regard: for example, the 1992 Report by the Conference Board of Canada, a powerful research and advisory business group, which calculated the financial loss to that country resulting from secondary school drop-outs;
- *availability of comparable information on educational achievement.* This can be influential if gathered both at national level – the studies of the newly established National Institute for Quality and Evaluation (INCE) have proved influential in Spain, notably its survey of primary education – and at international level, such as the studies of the IEA.

Even so, policy-makers launching initiatives against failure have on occasion thought it necessary to startle public opinion and schools into awareness of the problem. The Japanese National Council on Educational Reform reported, in 1985, a state of “desolation in education” – a much quoted phrase – while Belgium's Minister for the French community published a brochure in 1991 which set out starkly the figures for pupils repeating years of schooling, and accepted plainly that failure had become a major problem for that community. Views about how to present the issue, once identified, vary with culture, and with differences in educational organisation. But every country in its own way needs to face up to the indicators in Chapter II, which show that a substantial proportion of young adults do not possess the knowledge and skills needed for work.

In short, initiatives addressing failure, both of students and of schools, are undoubtedly justified in socio-economic terms. And there is evidence that action at an early rather than at a late stage will make intervention more effective. But, since such initiatives usually attract much attention and even create controversy, their successful implementation may require policy-makers to confront the public and schools themselves with facts which challenge their preconceptions and cultural assumptions.

### Responsibilities have to be clearly defined

The responsibility for addressing failure is shared among many actors in the educational system: politicians, administrators, principals, teachers, parents, inspectors, and the pupils themselves. But who should take the lead? The starting point, as has already been mentioned, is that a policy to address failure cannot succeed unless opinion is mobilised

behind it. In the first instance, therefore, the initiative must come from the top: the onus for initiating action lies with the authority with overall responsibility for running the system, either the national government or, in a federal system, the state or province. Only at that level is it likely that the data can be gathered to determine whether there is widespread failure, and if so, what form it takes. It is also at this level, that the economic imperative of addressing failure is most likely to be appreciated.

This is not to say that regional or local authorities, which have a significant role in the educational administration of many OECD countries, are unimportant actors. Indeed the role of, for example, school boards in the US in addressing failure has been significant. But they are most likely to be effective if:

- they are acting in the framework of an initiative from the top, which is able to mobilise opinion, energies and – a significant factor – resources;
- there is a clear understanding of the respective roles of the central, regional or local authority.

Whatever the division of responsibility between these levels of authority, it is particularly important that the responsibility for co-ordinating the provision of education with other services is also clearly identified. As the publication *Successful Services for our Children and Families at Risk* (OECD, 1996c) points out, these young people face multiple disadvantages which must be addressed by agencies beyond the boundaries of education: health, social services and employment services. Multi-agency initiatives are notoriously difficult to organise but – as the OECD study points out – it can be done, and the responsibility for co-ordination surely lies with government, be it central or local.

The individual school evidently has a role to play, a crucial role, according to the school effectiveness literature. As observed above, how much difference it can make depends on the degree of autonomy it enjoys. Pressures for school accountability must be matched by appropriate measurements and the authority to implement change. In particular, performance data need to be viewed against the local context within which the school works, and schools must be given the freedom – over finance and staffing for example – to make decisions to improve the quality of the education they provide. In this connection, it is noteworthy that recent reforms in many Member countries have emphasised the delegation of responsibility to the school level. This is not just confined to those coun-

tries pursuing “institutional” approaches to failure, but is an explicit aim of policy in Ireland, Italy and Spain, for example.

Expert intermediate organisations have made a crucial contribution in certain countries. Inspectorates can play a variety of highly constructive roles in evaluating teachers, schools and the systems in which they work, offering advice to teachers on classroom practice and to administrators on wider policy issues; and in some systems, exercising a supervisory or executive role. Research organisations can contribute considerably to action against educational failure by informing the debate and formulation of policy at national level, and by participating in the implementation and evaluation of particular initiatives.

The need for government leadership, service co-ordination, school autonomy and expert advice, suggests that any initiative to combat failure is likely to raise questions for policy-makers about the relationship between the school and the system within which it operates: the school’s autonomy and resources, and its relationship with the many other agencies who have a close interest in the quality of education, and which may increasingly try to hold the school accountable for the performance of its pupils. A national framework for the implementation of local measures for combating failure is necessary in order to avoid policy fragmentation, and the feedback between the system and school levels needs to be on-going.

### **Initiatives must be comprehensive**

It is generally accepted that there is a high correlation between poor pupil performance and social factors. The Spanish case study, for example, draws attention to research by the National Institute of Quality and Evaluation demonstrating a clear link between socio-economic background and primary school achievement. This is supported by the international school effectiveness literature which, while finding that schools can make a substantial difference to pupil achievement, nonetheless also concludes that most of the variation in pupil performance is accounted for by social factors.

In spite of this evidence, it is important to avoid the trap of social determinism: the assumption that if pupils come from a certain background, they are more or less doomed to do badly in the educational system. Firstly, it is the common experience of all education systems that a certain proportion of indi-

vidual pupils who come from disadvantaged backgrounds achieve highly at school. One may not know exactly how they do this, but the obvious conclusion must be that if some can do well with minimal help, others from the same backgrounds could do equally well if given some assistance. Both equity and economic interest require efforts to maximise their potential.

Secondly, the institution based approach to addressing failure is providing a substantial body of evidence to support the contention that children do not have to be the prisoners of their social background. In particular, the systematic inspection of schools in England has produced examples of neighbouring institutions which draw pupils from the same catchment area and same social background, yet demonstrate markedly different levels of student achievement. Inspectors attribute this to more purposeful and coherent school management and better classroom teaching. The English inspection exercise has also provided evidence that the link between the failure of schools as institutions and socio-economic factors is more complex than may previously have been thought: while most of the “failing schools” so far identified have been in relatively deprived areas, a substantial minority are not. These latter were preponderantly, but not exclusively, rural schools with two or three teachers.

The factors that cause failure are deeply intertwined: factors within the education system – curriculum, structure, certification, accountability, quality of teaching, school-level factors – and factors outside, notably the socio-economic backgrounds of students. Individual initiatives can have effect – targeted programmes, for instance, or institutional improvement – but to be most effective, strategies addressing failure must work within the framework of an “holistic approach” to the problem. They have to be integrated with parallel social and economic initiatives for social equality, implemented at the national, regional and local levels (OECD, 1996e).

### **A variety of support systems are required**

Inter-agency co-operation, as well as encouraging schools, families and communities to collaborate in a common purpose, and including other partners in the educational process, such as enterprises and foundations, should all contribute to “developing supportive frameworks for children from birth through to their integration into the workplace” (OECD, 1995b, p. 144). Four main measures have proved to be crucial in creating a supportive learn-

ing environment for low-achievers: improvement of early childhood education, of transition points between levels of schooling, of guidance services and of the co-operation between the school and the family.

Wider provision of a high-quality pre-school education is needed for pupils at risk to acquire the basic skills during their primary years. Although the transition from school to work has become a main policy focus in most OECD countries, a greater effort is required to facilitate other transitions throughout compulsory education; especially those between pre-school and primary education, and between primary and secondary school. In spite of the consensus among OECD countries regarding the need to strengthen educational and career guidance services, much remains to be done particularly in the case of the least advantaged students (for a fuller discussion on this topic, see OECD, 1996d).

Finally, recent OECD work has stressed the importance of a growing trend in many Member countries in parental involvement, for increasing the achievement of disadvantaged and special needs children. The evidence shows that parental involvement can be an important mechanism in breaking the vicious circle of social reproduction. By becoming involved in their children’s education, parents increase their understanding of the educational process itself; and, in the case of families with a low socio-economic background, it opens up possibilities for self improvement. Empowering parents also has a beneficial effect on the community. In the case of the least advantaged pupils, a more supportive general environment and parents who are better prepared to help them out individually, can make a crucial difference.

Two key methods of involving parents in schools can be found across OECD countries: reforms which aim to include parents in school governance (Denmark, England and Wales, and Spain are good examples), and systems which enable parents to better support their children’s learning – either at home or in school – by assisting them in extra-curricular activities or, even in some countries, in the classroom (two countries which pursue this policy, especially regarding disadvantaged students, are France and Ireland). An effort needs to be made to evaluate the effect of these different approaches on student outcomes, particularly for those sectors of the population with learning difficulties (OECD, 1997c).

## The active participation of teachers and school leaders is crucial

The quality of teaching, the classroom culture and the relationship between teachers and pupils are the main determinants of success or failure. Yet not all teachers have embraced the concept of failure with equal enthusiasm. There can be at least three reasons for this:

- They may believe that no successful action can be taken against failure: for example, if they attribute it to the general social conditions in which pupils live.
- They may be opposed to the proposed measures to combat failure: for example, Spanish teachers opposed increasing the numbers of pupils participating in the baccalaureate in the belief that it would lower standards.
- They may see failure as reflecting on them, even threatening them. This is particularly so in the case of identification of failure at an institution, where teachers feel themselves very much labelled as having personally failed. These fears may be justified: in Kentucky, teachers may be dismissed; in England, they may be the subject of procedures which can lead to the same outcome.

A particular problem arises if the teachers attribute the failure to the characteristics of the pupils. This can take two forms. One is to assert that since the pupils come from a deprived background, they cannot be expected to achieve much. Teachers who face classes of pupils from disadvantaged backgrounds sometimes have to grapple with problems of disruptive behaviour, cumulative underachievement and often a whole nexus of social problems which pupils bring into school with them. As observed in Chapter II, there is indeed a link to social and economic deprivation, but it is complex, and the failure of pupils cannot be seen as inevitable.

The second reason is the labelling of pupils as unintelligent or unmotivated, which teachers regard as irremediable. The Spanish case study, for example, talks of a mentality amongst teachers which categorises pupils as either good or bad, and does not see it as the teacher's task to do anything to change the attitudes of their students. Such an assumption is both a serious obstacle to addressing failure at school, and one of its causes.

In this context, it is a pity that not enough research has been done about the views of pupils regarding failure. The results of a survey of Spanish

students show that while many students accepted responsibility for their low achievement because of lack of application, many also thought their teachers were unhelpful or indifferent to them. Those pupils most at risk of failing are likely to be those who can least expect help and encouragement at home, and who are most likely to suffer low self-esteem or to become disaffected. Consequently, the teacher whose pedagogical practice is poor, or who shows indifference for the pupils, creates a self-perpetuating cycle of failure.

It is clear from the school improvement literature, for example, that one of the keys to raising standards in a school is for teachers to stop and reconsider assumptions about their classroom practice. And as the OECD study *Schools under Scrutiny* observed, "the acceptance of a culture of evaluation is becoming more widespread in a profession which often treats such developments with suspicion; many teachers now recognise that such a culture, preferably in a context of self-review, can help them to improve their own performance and that of their pupils" (OECD, 1995c, p. 25). This is a healthy development. An assumption by the teaching profession that they have nothing to learn would not only lead to stagnation. It would also create exactly the wrong culture in schools; a culture all the more damaging when one of the keys to economic competitiveness in the coming decades will be the ability of the workforce to update and diversify their skills throughout their working lives. A willingness of teachers to recognise that there are failings in the schooling system offers them considerable professional opportunities, because initiatives against failure are likely to raise their own skills and professionalism.

There is potentially a considerable role for professional teacher associations. There is much that a collaborative organisation representing teachers can do to promote the development of teaching as a profession: developing its ethos, status, training and skills. Some countries have national teaching councils to perform such functions: the example of the Ontario "College of Teachers" is given in the Canadian case study. But with or without such an organisation, professional associations representing teachers have enormous scope for taking the initiative in this field. Great changes will be expected of teachers in the coming years: education is rapidly moving up the political agenda, the skills required of our future workforce will change in scope and nature in response to economic demand, and new technologies will alter not only what is taught, but also

modes of teaching. Failure to address these changes will inevitably be perceived as educational failure on a large scale. The self-interest of teachers suggests that their leaders should take the lead in exploring the new frontiers of their profession. If the associations which represent them do take that initiative, they can promote the status, working conditions and job satisfaction of their members. If they do not, the danger will be of a growing perception, first, that the education system is failing and, second, that teachers' failure to adapt is a drag-anchor on the economy generally and on the employment prospects of their pupils in particular.

Teachers do not lead their professional lives in isolation, however. There is a considerable responsibility on school leaders to ensure that teachers are provided with the conditions necessary to enable them to teach effectively. The term "school leaders" does not just mean school principals: it includes also school boards or governors in systems that have such institution-based arrangements, and municipal authorities or similar bodies that exercise a responsibility for education at a broader level. But the responsibility for leadership must lie primarily with school principals and, in larger institutions, with assistant principals and heads of faculty who often share their managerial responsibility. Teachers are entitled to look to them to provide a framework of discipline and order so that classes can be taught without disruption; a friendly and welcoming climate in the school to foster pupils' self-confidence and enjoyment of learning; a clear curricular framework; the materials necessary for classroom teaching; the professional services necessary to provide for pupils with special needs; and – too often neglected – access to in-service training and development of quality and relevance, to enhance the teacher's professional skills.

### **A wide range of student learning abilities have to be met**

Three particular aspects of pedagogy should be mentioned here: differentiation, student assessment and grade repeating. Differentiation is important since many Member countries favour an inclusive approach to teaching: that is, that pupils should be taught in groups of mixed ability, and that there should not be separation of pupils by ability either within schools or between schools. Most countries view a comprehensive, mixed ability approach as a given starting point, an attitude reinforced by the trend towards integrating special needs pupils into "ordinary" schools.

The point that needs to be kept in mind is that the wider the mix of pupil ability in a class, the greater the demand that is made on a teacher's skills. It is not enough to plan the lesson carefully, to make clear to pupils what they are supposed to be learning, to convey the information in an interesting way and to engage pupils fully in their own learning. Faced with a wide range of abilities, the teacher has to differentiate carefully between the needs of different groups of pupils. The ablest must not become bored and lose interest, while the less able must not be left behind and become bewildered. This is a simple point to make, but extremely difficult to translate into practice. The implications for teacher training – both initial training and in-service development – are considerable.

Linked to this is the need for evaluation skills amongst teachers. The ability to assess what pupils have learned is essential for four reasons:

- Self-evidently, without well-developed evaluation skills teachers will not be able to achieve the differentiation necessary for the high quality teaching described above.
- The evaluation of what pupils have attained is a pedagogical tool of enormous potential because it permits the formative assessment of pupils. In planning future teaching, a clear understanding of which knowledge and skills a pupil has and has not acquired, and where the pupil's strengths and weaknesses lie, is a powerful way of raising that pupil's achievements if it is used to inform and plan future teaching.
- Accurate assessment of pupils' strengths and weaknesses is a crucial element in their orientation for their future studies and careers.
- Pressures for the accountability of educational institutions are likely to grow in the coming years. Even in countries where institutional accountability is not practised as such, there may now be requirements to publish certain pupil results: in France, for example, certain data on baccalaureate scores by individual schools. Publication of data in England and, in particular, the United States has generated intense debate on the validity of assessment measures. As more countries move down this road, it is in everybody's interest that teachers should be able to display reliable assessment skills.

It is most important, however, that formative assessment should be reinforced by external assessment. It gives teachers an external yardstick against which to validate their own judgements, which will help them in developing their own skills

of formative assessment; and it provides those outside the school with comparable data to use for the purposes of accountability of schools, to gauge the overall performance of the education system, and to identify areas of weak performance.

In some OECD Member countries, student assessment serves as a means to enforce grade repetition. This practice has a two-fold educational logic. Firstly, by making the pupil repeat the year's study, one assumes that he or she will acquire the knowledge and skills not acquired first time round. Secondly, other pupils who have made adequate progress are presumably protected from being delayed in their learning by their teacher's need to pay particular attention to less advanced pupils. The research evidence seems to confirm, however, that grade repeating has either negative or no consequence at all. For example, as indicated in Chapter II, the IEA Reading Literacy and TIMSS studies found that pupils who repeated a year of study one or more times in their school careers, had fallen some distance behind their contemporaries.

There are other strong arguments against repetition which help to account for the drift away from it. Firstly, in terms of pedagogical practice, it is rather a blunt instrument, unless reinforced by other remedial help; but the provision of additional help lessens the educational logic of the case for repetition and makes it less economical. Secondly, the means by which pupils are selected for repetition may be open to question. In Belgium, for example, teachers have tended to take repetition decisions on the basis of a normative distribution. Furthermore, the Belgian case study points to research in that country in which pupils' ability was checked by external tests: there were notable disparities between the test results and teachers' decisions on whether pupils should repeat the year. Pupils who should have progressed were held back, and pupils who should have repeated a year were allowed to progress. If decisions on repetition are based on teachers' own assessments – and they often are – the selection of pupils may not be reliable.

Thirdly, it may be counter-productive. The Spanish case study points to a survey showing that repetition creates a sense of failure and frustration amongst primary pupils and their families (although less so at secondary stage). It obviously stigmatises the pupils affected, not least in the eyes of their contemporaries at school. The Spanish experience suggests that parents do not see repetition as being in their children's best interests: at primary level it has recently been made subject to parental agree-

ment, and the rate has consequently been reduced to around 1 per cent at the end of this cycle, compared to 10 per cent a year at the upper end of secondary education. Repetition is also likely to discourage pupils from persisting in their studies. Half of Spanish students who undergo repetition during compulsory schooling do not obtain the corresponding qualification. The Japanese case study reports that, at upper secondary level, the particularly rigid requirement to pass every subject or repeat the year triggers many drop-outs.

Finally, there is a danger that repetition will reinforce educational inequalities. For example, the Belgian case study observes that pupils who repeat a year are more likely to come from immigrant families, many of whom belong to lower socio-economic groups.

This background of research and country experience probably explains a general trend of policy away from grade repetition in OECD countries. It has, over the years, been abandoned by Denmark, Finland, Greece, Ireland, Norway, Sweden and the United Kingdom. A number of other countries have taken measures to restrict it, including France, and most recently Portugal. As was already mentioned, the French community of Belgium, France and Spain have moved to a system of curriculum cycles lasting several years, with repetition forbidden except at the end of a cycle.

### **Action against failure is cost-effective**

Despite the different guises that failure assumes in diverse educational cultures, facing this complex problem has become an economic and social necessity for OECD Member countries. The cost of the various types of intervention examined here can be classed in rough declining order of magnitude:

- *systemic change involving recurrent costs, mostly salaries:* this includes early childhood education, which can be a particularly expensive option depending on the proportion of the age group already involved, and increasing teacher numbers or salaries;
- *systemic change involving non-recurring costs:* for example, changes to the curriculum and courses, whose implementation may require considerable administrative costs;
- *initial teacher training:* this is an area on which some countries already spend large sums and even small improvements in performance would be relatively cost-effective;

- *targeted projects and network intervention*: these will vary enormously in cost depending on their scale and duration;
- *in-service training*: in principle, a less expensive option than initial training but which is only cost-effective if of high quality and well-targeted;
- *institutional intervention*: experience in England and New Zealand suggests this is relatively inexpensive and cost-effective, since it relies on getting better value from existing resources; the main costs are removal of a few staff in the schools concerned and in-service training for others;
- *promotion of teaching standards through a national teaching council*: an inexpensive and cost-effective option.

Whatever the cost of these measures, it must be weighed against the actual “costs” of failure in different OECD countries. Few estimates have been made, but the Flemish community of Belgium has computed the cost of its “repeating” pupils, for the school year 1990-91, at 6 billion Belgian francs; and the Conference Board of Canada has made the following calculations of the financial and economic cost of school drop-outs for 1992:

- Canada will lose more than \$4 billion in present-value terms over the working lifetimes of nearly 137 000 youths, who dropped out of secondary school instead of graduating with the class of 1989.
- Each individual male drop-out will lose on average, nearly \$129 000 – in 1992 dollars – over his working lifetime, while the female drop-out forfeits \$107 000.
- As an investment vehicle, education has a higher rate of return than almost any alternative investment project. The rate of return to society of investing in secondary school education is 19 per cent for males and 18 per cent for females.
- Canada could save \$26 billion if the drop-out rate were reduced from 34 per cent to 10 per cent by the year 2000.

Even though these figures are only approximate estimates, they make a thought-provoking backdrop against which to assess the cost-effectiveness of the various possible initiatives examined above.

Resource allocation tends to take two forms: a special grant, or general education funding. Special grants are by their nature linked to a specific programme addressing some aspect of failure, and as such have the advantages already mentioned in the first part of this chapter. If they are linked to a bidding process, they can be used to favour innovative

projects: this happens in Portugal, where the “Programme of Education for All” offers resources to address particular problems and remedies identified by schools. There is, however, a certain tension between the use of special grants and the need for a holistic approach to the issues surrounding educational failure. In particular, administrative dynamics and the requirements of financial accountability tend to mean that grants will focus on the activity of one particular service – education, or social services, or health – rather than on a multi-agency initiative.

General education funding, in the form of a grant from national government, or local government, or commonly a mixture of both, has the advantage of greater flexibility. If it is to be used in preference to special grants in order to underpin initiatives against failure, however, it implies distribution to schools through a progressive, rather than a regressive system. This gives rise to three issues:

- First, there is a tension between equality and transparency: developing a financial distribution mechanism into an equalising mechanism, so that it reflects the incidence of social need accurately, invariably means incorporating additional indicators. As a result, the fairer one tries to make such a mechanism, the more complicated it becomes. Australia and the United Kingdom have developed sophisticated equalising mechanisms for distributing central government grants (which cover other services in addition to education), but this measure of equality is achieved at the cost of making the system complex. Furthermore, the indicators themselves can become controversial, especially if sensitive measures such as ethnicity are used.
- Second, it is difficult to identify indicators which will act as reliable proxies for social need, are available on a consistent and reliable basis across the country or state, and are not susceptible to being manipulated by those who stand to benefit (if, for example, one used as an indicator the number of pupils identified by a school as being at risk, there might be an obvious and rather perverse incentive for some schools to identify a large number of such pupils).
- Thirdly, if schools and teachers are held to be to some extent responsible for the achievement of their pupils, channelling funds towards those with lower pupil achievement risks being seen by other schools as “rewarding failure”.

## MAIN FINDINGS AND POLICY CHALLENGES

Recent reforms in the education sector can be characterised as originating from competitiveness, finance, and equity-driven concerns. They have aimed, respectively, to raise the quality of educational outputs; make a more cost-effective allocation of resources; and reach those groups of students who lag behind educationally. Even though OECD Member governments have focused over time on one or more of these three types of reforms, today, it has become imperative for policy-makers to combine quality, efficiency and equity goals in education. An increased understanding of the different manifestations of educational failure and of the policies needed to address them are at the core of this imperative. This chapter will look at both of these issues, by summarising the findings of Chapters II and III, and drawing out the main challenges for policy-makers.

### LESSONS FROM INDICATORS OF FAILURE

In today's changing industrialised societies, education systems are having to meet increasingly challenging demands because the minimum level of knowledge and skills needed in order to succeed in the labour market has risen steadily over the past few decades. The analysis presented in Chapter II suggests that the greatest risk of marginalisation, unemployment or low income is no longer confined to those who have failed to complete primary or secondary schooling. In most OECD countries, it now seems that it is not until young people have attained at least an upper secondary certificate that their chances of finding employment with adequate pay significantly improve. The universal provision of a full cycle of secondary education will therefore become the benchmark for assessing failure or success at school.

The statistical analyses presented in this study confirm that countries with poor average performance are more likely to have a high proportion of low-achieving students. They show a wide gap between the lowest and highest achievers of the

same age within each country, with an achievement range equivalent to up to four years of schooling. However, the data also demonstrate that student achievement does not have to be widely dispersed in order for a system to perform well overall.

Regarding the profile of the students at risk of failing at school, a tendency over the past few decades can be observed: differences in social background and gender associated with disparities in achievement have become less marked. Yet social disparities continue to be a major determinant of student performance. In order to assess the progress made in reducing the risk of failure arising from students belonging to a disadvantaged socio-economic group, an internationally comparable indicator for "socio-economic standard" (SES) is needed.

Children with a low SES sometimes also belong to an ethnic minority. Comparative data corrected for different characteristics of the immigrant population across countries are also needed to assess the result of diverse educational structures or teaching practices in compensating for a disadvantaged social or immigrant background.

Although pupils with special educational needs and pupils at risk of failing are two distinct categories, there is an obvious overlap between the factors which create the need for remedial action. Therefore, programmes to help either category must be co-ordinated with each other. In both cases, the creation of supportive learning environments is crucial. In order to create such environments, co-ordination of policies between levels and across sectors is particularly important.

Pupils who drop-out of school, or who leave school without gaining a qualification or possessing adequate skills for work, merit particular attention from policy-makers since they are economically vulnerable and represent potentially a considerable cost to society. The motivation for these pupils' behaviour is complex and varies according to social, cultural and economic conditions. Two important

conclusions can be drawn from the statistics on early school leaving:

- amongst those who drop-out of school, twice as many say they left due to measures such as being required to repeat a year of study or to economic need, as those who say they left because of lack of interest or desire to take up work; and
- even if students who leave before the end of compulsory schooling do obtain jobs fairly quickly, these are often only short-lived or low paid.

A high quality early start, a more flexible curriculum, smoother pathways and transitions across levels, improved educational and career guidance, and raising the age for completing compulsory education in those countries where that age is still comparatively low, are some key measures for addressing these problems.

There is also a need to evaluate the content of the qualifications acquired by those students who do graduate from secondary education in view of disquieting findings in this respect by a survey on adult literacy (see OECD and Statistics Canada, 1995 and OECD *et al.*, 1997). The survey shows that people with upper secondary qualifications (and in some cases even with post-secondary qualifications) often have reading skills which are below this level. This calls into question the real value of the qualifications obtained and justifies the efforts undertaken in some OECD countries to review the standards to be attained by upper-secondary graduates.

Finally, it is important to stress that young adults with poor qualifications and skills, who need additional education more than most, are the least likely to engage in further learning. Therefore, a special effort needs to be made to ensure that these young people not only acquire the appropriate knowledge and skills for successful integration into the world of work, but the motivation to continue learning over a lifetime.

## LESSONS FROM POLICY PRACTICE

The notion of “educational failure” refers to a complex problem, which is strongly affected by specific national contexts. No single or overarching explanation can account for it; no simple or universally applicable measures can be found to address it. Overcoming failure requires a sustained and long-term effort to meet the needs of all students, especially of the low-achievers, through different combinations of three main approaches – systemic, institutional and programmatic – which have been

discussed in Chapter III. In spite of the wide range of measures adopted across countries, this study proposes policy considerations which might be useful for the development of strategies to combat failure or promote success at school.

### Early recognition, early action

Any significant level of failure in the schooling system, either by pupils or by institutions, threatens economic competitiveness, damages the social fabric and wastes resources. Policy makers need to review their education systems to identify the extent to which failure at school exists and what form it takes, bearing in mind that early recognition and action will be more efficient as well as more cost-effective.

### Combating failure on a wide front

Major initiatives to address failure will usually require mobilisation of public opinion to support reform. Public misperceptions or deeply entrenched values may need to be challenged and this requires leadership from the national level. Yet other key actors – sub-national governments, parents and students themselves, school leaders and teachers – should also be enrolled to support these initiatives since failure must be tackled on a wide front. To be most effective, such initiatives require inter-agency co-operation (including with non-governmental organisations) as well as collaboration between schools, families and communities.

### Co-ordinating policies between levels and across sectors

It is essential that the respective responsibilities of the different public agencies involved be clearly defined and co-ordinated. Such initiatives are likely to raise questions about the degree of autonomy granted to schools, their relationship with other education agencies, and the resources available to them. Therefore, the feedback between the system and school levels needs to be on-going.

### Combining different policy approaches

In formulating a strategy to combat failure, policy-makers need to consider both overall reforms to the educational system to prevent failure occurring, and targeted programmes to remedy existing manifestations of failure. A common response to systemic failure is reform of the curriculum: of its content, its

ethos or its structure. In practice, these three facets of the curriculum are not clearly distinct and there is a need to approach such reforms in a holistic way, so that changes also encompass teacher education, new approaches to assessment and new instruction materials.

Another approach is reform at institutional level. Countries which have followed this course report significant improvements in pupil achievement. However, where success is reported, such initiatives have been accompanied by broader packages of support for schools with problems. A further approach is programme assistance. Policy makers need to consider the rival merits of the traditional targeted project approach and the increasingly popular network approach. Each has advantages and drawbacks and the two approaches need not be mutually exclusive.

### **Active participation of teachers and principals**

The active participation of teachers is crucial for addressing failure. This may require considerable changes in their practices, habits and beliefs. If teachers and their professional associations take the initiative, the professional development benefit to them can be considerable. However, an enormous responsibility also lies with school principals. It follows that teachers and principals should be given the necessary training and support.

### **Flexible approaches to address different student needs**

The evidence suggests that individualising instruction and aid is likely to be a more effective and resource-efficient measure than making pupils repeat a year of study. A pedagogical practice which meets the needs of all students requires a flexible curriculum. Efforts should be encouraged to challenge the rigidity of the age-grade system by the introduction of “cycles” in non graded elementary schools. The evaluation of student performance through different combinations of continuous formative assessment and external assessment is also crucial in this respect.

### **Initiatives against failure are cost-effective**

Any initiative against failure will have costs. Resources can be distributed – at a local level – either through specific programmes, or through funding mechanisms for areas or institutions which

have particular problems. Regardless of the approach taken in different national contexts, the evidence indicates strongly that countries which do not purposefully address student and school failure risk paying a considerable economic and social penalty.

## **MAIN POLICY CHALLENGES**

At a time when the role of education as an equalising institution has again come to the forefront, addressing the needs of students with diverse learning abilities has become a major challenge for all education systems. This is precisely the focus of efforts at combating educational failure. Meeting this challenge implies looking ahead. In the 21st century, success at school will no longer be measured by the number of years studied nor by the attainment of a diploma for life. The successful students of tomorrow will be those who have acquired the knowledge, skills and motivation required to continue learning throughout a lifetime. Successful teachers will be those most able to guide their pupils through different learning pathways. And successful schools will be those institutions which, together with other partners, provide the most adequate environment for both – students and teachers – to attain these objectives.

The present study has discussed a series of options for policy-makers considering failure in the context of their own education systems. Out of these, three prime targets for policy action can be pointed out:

- *A comparative knowledge base needs to be developed.* Much more hard evidence about the different aspects of failure and success is needed; more research has to be done about what goes on in the classroom and about the relationship between educational outcomes and economic performance. Policy makers need to identify suitable indicators and set up adequate data-gathering arrangements, both at the national and international levels. A powerful contribution can be made by the publication of reliable comparative data on pupil achievement and by the commentary of respected institutions which are independent of government: national inspectorates, investigative commissions, business organisations. Expert advice of highly professional national inspectorates and research institutes in this field can be a great asset.
- *Barriers for implementing pedagogical innovations need to be overcome.* Much thought and collaboration is needed between policy-makers, researchers and

other actors involved in education, in order to develop ways to implement new pedagogical techniques, targeted towards special needs and circumstances of individual schools and students. Teacher training should focus on effective classroom practices. Particular attention needs to be devoted to improving the professional conditions of teachers, as well as rewarding those who teach in less favoured areas, subjects and branches.

- *Evaluation and dissemination efforts have to be improved.* The focus on the quality of educational outcomes has led to the establishment of mechanisms for the evaluation of schools, and the performance of

teachers and students. Furthermore, experience has shown that continuous improvement requires the creation of a “culture of evaluation” among the main educational actors. Yet very few of the policies attempted to overcome failure have been fully evaluated or systematically monitored. Monitoring efforts have to be multiplied in order to arrive at a clearer distinction between good and bad practice. And “what works” for combating failure or promoting success needs to be more widely disseminated, while bearing in mind the difficulties in generalising from experiences conditioned by different national contexts.

*Part Two*

## **COUNTRY CASE STUDIES**

As is clear from Part 1 of this report, perceptions and definitions of failure at school vary greatly from one OECD country to another. So do policies and practices for combating failure. The five case studies which follow were commissioned to cover a range of problems and approaches in different OECD countries. They are illustrative, not comprehensive.

Two of the case studies are comparative. One compares policy and practice between Australia, New Zealand and the four component parts of the United Kingdom. Another, while concentrating primarily on Belgium, contrasts experience there with practice in other OECD and EU countries. The other three case studies concentrate on single countries: one on the Canadian province of Ontario; a second on Japan; and a third on Spain.

The aspects of failure which come under examination are varied, and provide illustrations of many of the themes covered in the first part of this report. The Belgian case study concentrates exclusively on grade repetition, which is also one of the themes of the Spanish and Japanese case studies. The problem of school drop-outs receives considerable attention in the Canadian, Japanese and Spanish studies. Other themes which recur throughout the case studies are the difficulty of changing entrenched views among the public and the teaching profession; the distorting effect of the importance attached to university entrance exams; the

role of inspectorates and research organisations; remedial programmes and systemic approaches to solve the problem.

In institutional terms, the comparative study of the United Kingdom, New Zealand and Australia concentrates on policy at the level of the school; the Belgian, Japanese and Spanish studies view the problem from the national policy maker's perspective; and the Canadian case study examines issues from the intermediate point of view of the province and school boards.

Since these studies are illustrative, one cannot easily draw from them universally applicable conclusions. However, three common features are worth noting. Firstly, all these countries are addressing fundamentally the same cluster of problems, even though these are perceived and defined differently according to national educational traditions. Secondly, there is a general shortage of comparative reliable data, not only between countries but within countries. Finally, the failure problem seems amenable to solution only if cohesive policies are pursued across different levels of the education system.

Although the case studies have been edited for space reasons, the views expressed are those of the authors and they do not commit the OECD nor the countries concerned.

## BELGIUM: FROM GRADE REPETITION TO SCHOOLING BASED ON CYCLES

The high rate of grade repetition in Belgium has been a major political concern for at least a decade. This was clearly stated by the Education Minister of the French community of Belgium, Mr Ylieff, in 1991: "Both national and international statistics show that failure in the schools of the French community of Belgium is alarming: in any class of pupils, more than one third of children repeat at least one grade at primary school, and only one adolescent out of five reaches the end of secondary education at the normal age". The following analysis deals with "grade repetition" – the practice which consists of making a student repeat a year of study – and "school retardation", the cumulative effect of such a practice on students individually and on the school population as a whole. It centres on the case of Belgium and, wherever possible, introduces comparisons with OECD or EU countries.

### GRADE REPETITION AND SCHOOL RETARDATION: AN INTERNATIONAL PERSPECTIVE

There is little international data on grade repetition. In 1991, however, UNESCO published figures on grade repetition for each of the six grades of primary school in eleven European countries, eight of which are OECD Members. The figures in Table 1 show that the highest grade repetition rates occur in the first year of schooling (except in Germany, Spain and Poland, where teachers consciously try to limit grade repetition at the beginning of schooling). The highest figures for grade repetition can be observed in Portugal, although this can be explained by a still large rural population and the high level of drop-outs in primary education.

Comparable data on Belgium, collected in 1992, are available for the French community only. Table 2 shows the average percentage of repeaters in the last pre-school education grade and the six primary education grades. The figures concerning the last pre-school grade and the first primary grade are par-

Table 1. **Grade repetition rates in eleven European countries**

|             | Primary education (percentage) |         |         |         |         |         |
|-------------|--------------------------------|---------|---------|---------|---------|---------|
|             | Grade 1                        | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 |
| Bulgaria    | 4                              | 3       | 3       | 4       | 4       | 3       |
| Germany     | 1                              | 2       | 1       | 1       | –       | –       |
| Spain       | 1                              | 4       | 2       | 2       | 6       | –       |
| France      | 8                              | 5       | 4       | 4       | 4       | –       |
| Hungary     | 5                              | 3       | 3       | 3       | 4       | 4       |
| Italy       | 1                              | 1       | 1       | 1       | 1       | 1       |
| Malta       | 3                              | 1       | 2       | 1       | 0       | 3       |
| Netherlands | 4                              | 4       | 2       | 1       | 1       | 1       |
| Poland      | 2                              | 2       | 2       | 3       | 3       | 3       |
| Portugal    | 19                             | 19      | 11      | 11      | 13      | 11      |
| Romania     | 4                              | 1       | 1       | 1       | 3       | 2       |

Source: S. Gajraj (1991), *Statistical Issues. Primary Education: Repetition*, Section of Statistics on Education, Division of Statistics, UNESCO.

Table 2. **Grade repetition rates  
in the French-speaking community of Belgium**

|                   | Primary school (percentage) |         |
|-------------------|-----------------------------|---------|
|                   | Number of schools           | Average |
| 3rd "maternelle"  | 1 128                       | 3.8     |
| 1st primary grade | 1 128                       | 7.0     |
| 2nd primary grade | 1 124                       | 4.2     |
| 3rd primary grade | 1 104                       | 3.7     |
| 4th primary grade | 1 095                       | 3.4     |
| 5th primary grade | 1 099                       | 5.5     |
| 6th primary grade | 1 083                       | 2.8     |

Source: D. Lafontaine and M. Lejong (1992), *Radioscopie de l'enseignement en Communauté française de Belgique. Rapport thématique*, Université Libre de Bruxelles, Université de Liège, Université de Mons-Hainaut.

ticularly striking. They show that, by the end of the first primary grade, almost 11 per cent of pupils have been held back. This coincides with the trend observed in other OECD countries (see Table 1).

Although international comparisons are instructive, they have to be interpreted with caution. For example, the above-mentioned figures for France and Belgium are similar, yet Table 3 shows that the

Table 3. **Evolution of grade repeating rates in France**

Primary and secondary education (percentage)

|                     | 1970-1971 | 1975-1976 | 1980-1981 | 1985-1986 | 1987-1988 | 1990-1991 | 1991-1992 |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1st primary grade   | 17.6      | 14.3      | 12.3      | —         | 10.1      | 7.7       | 6.4       |
| 5th grade           | 15.0      | 10.6      | 9.9       | —         | 6.9       | 4.1       | 3.2       |
| 1st secondary grade | —         | 9.5       | 10.7      | 12.5      | 10.9      | 8.6       | 8.3       |
| 2nd secondary grade | —         | 6.5       | 12.1      | 16.4      | 14.8      | 11.0      | 10.3      |
| 3rd secondary grade | —         | 7.0       | 8.2       | 9.4       | 8.5       | 6.8       | 6.4       |
| 4th secondary grade | —         | 7.3       | 9.6       | 14.3      | 13.9      | 9.6       | 9.1       |

Source: M. Crahay (1996), *Peut-on lutter contre l'échec scolaire ?*, De Boeck, Brussels.

occurrence of grade repetition has significantly decreased in France over the past two decades.

In theory, it is easy to calculate school retardation rates on the basis of the theoretical age of pupils in a given grade and the identification of pupils one year or more over that age. This calculation is merely an *indirect* estimate of "failure" since different categories can be distinguished amongst pupils who have been held back: pupils who repeated one or several grades; pupils who entered primary school later than the normal age because they were held back at pre-school level; children from abroad who, not having a mastery of the language of instruction, were put into a class of younger pupils. Nonetheless, since these traits are common to most educational systems, a reasonably reliable international comparison is also possible in this respect. A report presented to the European Union in 1988 calculated the following school retardation rates at the end of primary education in ten OECD countries (see Table 4).

Table 4. **Retardation rates in ten OECD countries**

End of primary education (percentage)

|                | Retardation rates |
|----------------|-------------------|
| Denmark        | 0.0               |
| United Kingdom | 0.0               |
| Greece         | 1.3               |
| Italy          | 1.3               |
| West Germany   | 1.9               |
| Netherlands    | 2.4               |
| Luxembourg     | 6.1               |
| Spain          | 6.9               |
| Portugal       | 16.6              |
| Belgium        | 19.9              |

Source: R. Rivière (1998), *L'Europe en échec scolaire*, CEE, Brussels.

The variation between countries is striking. Two of the countries listed, Denmark and the United Kingdom, do not practise grade repetition (as is also the case in Sweden, Finland and Norway, while in Ireland grade repetition is so uncommon that it is statistically insignificant). Equally striking is the variation between those countries which do practise grade repetition. In particular, the rates of Portugal and Belgium are remarkably high. France is not included in the table but figures for France for the school year 1990-1991 are similarly high, and also show that grade repetition is more than ten times more common than grade acceleration (pupils promoted to classes where the average age is higher than theirs). Statistically, this appears to be abnormal: if levels of grade acceleration and grade repetition simply reflected different levels of personal development in pupils, both percentages would be approximately equal.

## COMPARISONS BETWEEN THE TWO COMMUNITIES OF BELGIUM

The figures in Table 5 show two particular similarities between the French-speaking and the Flemish communities of Belgium: a high grade repetition rate from the first year of primary education onwards and a significant fall in school retardation over the period.<sup>13</sup>

But there are also some significant differences. At the beginning of this period, in both communities, the retardation rate rose cumulatively throughout primary education. This remains true for the French community at the end of the period studied, whereas in the Flemish community the retardation rate hardly increases between the second and sixth grade. The second and most obvious observation is that the retardation rate of the Flemish community is significantly lower than that of the French community at all stages. This is particularly surprising if one

Table 5. **Changes in retardation rates between 1960 and 1988**

Primary education (percentage)

|           | French-speaking community |           | Flemish community |           |
|-----------|---------------------------|-----------|-------------------|-----------|
|           | 1960-1961                 | 1987-1988 | 1960-1961         | 1987-1988 |
| 1st grade | 22.4                      | 11.5      | 10.2              | 9.0       |
| 2nd grade | 32.0                      | 15.8      | 14.4              | 11.8      |
| 3rd grade | 38.1                      | 19.8      | 16.2              | 12.4      |
| 4th grade | 41.6                      | 22.9      | 18.4              | 12.7      |
| 5th grade | 44.0                      | 26.3      | 20.9              | 13.1      |
| 6th grade | 44.7                      | 26.7      | 21.6              | 12.5      |

Source: M. Crahay (1996), *Peut-on lutter contre l'échec scolaire ?*, De Boeck, Brussels.

considers the figures for 1960-1961, for at that time responsibility for education in Belgium was shared by the two national ministers, one for the Flemish community, the other for the French community, who were required to co-ordinate their policies – an arrangement which led to an almost identical educational organisation throughout the country.<sup>14</sup>

Comparable data are also available for both communities at secondary education level, although they do not cover the same periods. Table 6 shows that school retardation has increased at secondary level in both linguistic communities. If we take the figures for the 1980s, there is a significant increase in school retardation between the final grade of primary education shown in Table 5, and the first grade of secondary education shown in Table 6. Although the figures for the Flemish community remain lower than those of the French community throughout the period of schooling, they show a marked acceleration at secondary level.

Table 6. **Changes in retardation rates between 1972 and 1988**

Secondary education (percentage)

|           | French-speaking community |           | Flemish community |           |
|-----------|---------------------------|-----------|-------------------|-----------|
|           | 1972-1973                 | 1986-1987 | 1972-1973         | 1987-1988 |
| 1st grade | 43.5                      | 46.3      | 17.8              | 21.6      |
| 2nd grade | 47.8                      | 54.6      | 22.8              | 27.8      |
| 3rd grade | 53.0                      | 61.3      | 29.8              | 35.2      |
| 4th grade | 57.8                      | 63.6      | 36.2              | 41.4      |
| 5th grade | 56.6                      | 62.8      | 36.5              | 43.9      |
| 6th grade | 54.1                      | 58.4      | 41.8              | 40.1      |

Source: M. Crahay (1996), *Peut-on lutter contre l'échec scolaire ?*, De Boeck, Brussels.

More recent figures still show striking levels of school retardation. In 1993, for the six grades of secondary education in the French community, the number of pupils held back by one grade or more could be broken down as follows: 27 per cent for the first grade, 19 for the second, 10 for the third, 4 for the fourth, 1 for the fifth, and less than 0.5 for the sixth. One can therefore conclude that, although in Belgium the level of school retardation at primary and secondary levels has decreased, it remains at an alarmingly high level, particularly in the French community.

### Which pupils are held back?

As in other areas of educational performance, there are differences in the data relating to boys and girls. Data collected in the French community of Belgium show that girls repeat less often than boys, both at primary and secondary level (see Stegen and Vlassis, 1994). A more controversial issue, the social and ethnic origin of these pupils, seems to be almost taboo in Belgium. In principle, it might be assumed that children of foreign origin, who also come from a disadvantaged background, are more likely to be held back a year or more and one of the few studies on this issue (Grisay, 1988) concluded that “pupils who have repeated a grade seem to come from families of modest social status”.

In any case, several meta-analyses have shown that grade repetition more often has negative effects than positive ones. One could therefore hypothesise a reciprocal causality: pupils from modest backgrounds begin schooling with a lower general level of competence than pupils from well-off backgrounds; both their background and their performance make them more vulnerable to grade repetition thereby compounding their difficulties at school. This suggests that grade repetition not only amplifies the difference in performance between pupils, but also reinforces social inequalities.

As far as the ethnic origin of pupils who repeat a grade is concerned, data are available for both communities, although not for the same years, and it should be noted that the pupils of foreign origin in the primary schools of the French community amount to 20 per cent of the total student population, compared with 6 per cent in the Flemish community. Table 7 conveys two interesting messages. The most obvious one is that, in both communities, the proportion of pupils from abroad held back by one grade or more is higher than the percentage of native pupils. But the same figures show that, if

Table 7. **Retardation rates by origin of pupils**

Primary education (percentage)

|                                        | French-speaking<br>community and<br>German communities<br>1984-1985 | Flemish community<br>1988-1989 |
|----------------------------------------|---------------------------------------------------------------------|--------------------------------|
| Belgians                               | 26.1                                                                | 11.0                           |
| Foreign pupils born in<br>Belgium      | 40.1                                                                | –                              |
| Foreign pupils born<br>outside Belgium | 54.3                                                                | –                              |
| Foreign pupils<br>(average)            | 47.3                                                                | 43.6                           |

Source: M. Crahay (1996), *Peut-on lutter contre l'échec scolaire ?*, De Boeck, Brussels.

foreign pupils are excluded from the calculation, the retardation rate among pupils in the French community remains more than double that of the Flemish community. The popular conviction in Belgium that school retardation is due above all to the presence of non-national pupils is shown to be far from true.

The high rate of grade repetition and school retardation in Belgium may be linked to the relatively low proportion of students leaving compulsory education with a completion diploma. According to OECD data, the graduation rate for Belgian students is 76 per cent, compared with an average of 80 per cent across the OECD area (a figure which would be higher but for the inclusion of Turkey, which has a very low graduation rate of 29 per cent). The point might be better made by saying that Belgium has the sixth lowest graduation rate amongst OECD Member countries. This is all the more surprising since Belgium also had the highest percentage of sixteen and seventeen-year olds enrolled in education of all OECD countries and the fifth highest proportion of young people enrolled in higher education (OECD, 1995d).

### **“Pedagogical discretion” of teachers**

A key element of any education system is the manner in which pupils are assessed and awarded qualifications. Practice varies greatly between OECD countries. Few countries have a certification process when pupils leave primary school. This can usually be ascribed to a desire to guarantee continuity between primary and lower secondary education, especially in the countries where there is a “common stream” at lower secondary level. At the end of

statutory secondary education, there is always some form of final certification, possibly based on teacher assessment of the pupil's work, reinforced in some OECD countries by external tests. Upper secondary education is followed in most cases by external tests, with very few Member countries relying solely on evaluation of the pupil by the teacher.

Belgium is one of the four OECD countries without any external evaluation process, the others being Greece, Portugal and Spain. But in these three other countries, extensive measures have been taken to discourage grade repetition. Belgium is unusual in having a certification process at the end of each of the three levels of schooling, and in relying solely on assessment of the pupil by the teacher to decide whether a certificate is awarded. This gives the teachers considerable control over the destiny of their pupils (Eurydice, 1994).

This control should be considered in the context of the unusually wide “pedagogical discretion” that Belgian teachers enjoy. In Belgium, as in most other OECD countries, the central government determines the general objectives of the educational system, the choice of subjects of study and the weight given to each of them. And, as in most Member countries, the choice of teaching methods is determined partly centrally, and partly locally. But in three other areas – the minimal competencies expected from pupils, the teaching materials and the evaluation tools to be used – there is great variety of practice among countries. Both communities in Belgium leave these three elements to the discretion of individual schools and teachers. Given that they are crucial in determining whether a pupil has to repeat a grade or not, this has obvious implications for the practice of grade repetition. Although Germany and Denmark give the same discretion in the three areas to teachers, neither of these countries practises grade repetition.

In short, Belgium gives a great deal of discretion to teachers in matters directly affecting the evaluation of their pupils: the certification of pupils at the end of each schooling stage is based on their assessment, and they determine the minimal competencies expected from pupils and the evaluation tools to be used. This raises serious questions about the equivalence of standards in different schools. While it is understandable that practitioners should insist on considerable professional discretion, it is equally legitimate for policy-makers to want all schools to provide approximately the same quality of education.

Table 8. **Teacher's decision-making power in twelve OECD countries**

Primary and lower secondary education

|                           | Decision on grade repetition | Decision on streams to be followed | Control of evaluation | Minimum competencies | Teaching manuals |
|---------------------------|------------------------------|------------------------------------|-----------------------|----------------------|------------------|
| Belgium (French-speaking) | Yes                          | Yes                                | Yes                   | Yes                  | Yes              |
| Belgium (Flemish)         | Yes                          | Yes                                | Yes                   | Yes                  | Yes              |
| Germany                   | Yes                          | Yes                                | Limited               | Yes                  | Yes              |
| Netherlands               | Yes                          | Yes                                | Limited               | No                   | Yes              |
| Luxembourg                | Yes                          | Yes                                | Limited               | Yes                  | Limited          |
| Italy                     | Yes                          | No                                 | Limited               | Yes                  | Limited          |
| Portugal                  | Limited                      | Yes                                | Yes                   | No                   | Limited          |
| Spain                     | Limited                      | No                                 | Yes                   | No                   | Yes              |
| France                    | Limited                      | No                                 | Limited               | No                   | Yes              |
| Denmark                   | No                           | No                                 | Limited               | Yes                  | Yes              |
| Ireland                   | No                           | No                                 | Limited               | Yes                  | Limited          |
| United Kingdom            | No                           | No                                 | Limited               | No                   | Yes              |
| Greece                    | Limited                      | No                                 | Yes                   | Yes                  | No               |

Source: Eurydice (1994).

Different OECD countries have used various means to guarantee the quality of education. Most have inspectors, although their functions may differ. Some countries rely heavily on school principals to guarantee the implementation of educational programmes. Others have organised a national evaluation system at the end of each education cycle. There are many other possibilities but, in practice, two broadly opposite approaches can be distinguished. One consists of specifying what and how teachers might teach and then trying to check, through classroom observations, what they actually do. The other consists of setting objectives for teachers in the shape of minimal competencies or objectives that pupils must have acquired by the end of an educational cycle. Standardised tests belong to this second category and have been adopted by France, the Netherlands and the United Kingdom. Belgium is still hesitating.

Teachers' decision-making power varies considerably from one country to another. The synoptic table below covers primary and lower secondary education in twelve OECD countries, and considers teachers' decision-making power in the following areas:

- Can teachers decide to make pupils repeat a class?
- Do teachers participate in the decision to steer students towards the various available streams at the lower secondary level, in those systems where such streams exist?
- To what extent are teachers responsible for the evaluation of pupils?

- Do teachers define minimal competencies and choose teaching manuals?

Table 8 clearly shows that teachers have a wider range of discretion in Belgium than in any other OECD country. Evidence from research seems to confirm a link between this fact and the high rate of grade repetition which exists in this country. In 1980-81, 1 500 fifth-grade pupils from 53 primary schools took part in a survey to compare their performance in the French language – as assessed by the class teacher – with their performance in an external test based on the competencies specified by the curriculum. The survey shows that the range of student outcomes is narrower in the external test than in the internal assessment. In other words, the assessment of pupils by their own teachers appears to amplify the differences in their performance. Similar findings were reported in an exercise covering 1 400 fourth-grade pupils in 52 primary schools, which compared their performance in French language and mathematics with the scores given to the same students by their teachers at the end of the school year. This analysis showed clearly that grade repetition depends more on the teacher than on the student's performance, since some of the pupils included in the sample were made to repeat the year despite the fact that others performed worse than they did.

## RESPONSES TO FAILURE AT SCHOOL

### The 1983 reforms

Legal reforms, in 1983, extended compulsory schooling from the age of 14 to 18 (albeit not neces-

sarily full time) and limited the time a pupil could spend in primary education to seven years. In theory, this was supposed to limit the scope of grade repetition. In practice, this did not always happen, since pupils could have access to secondary education via the “reception” class without necessarily completing all six grades of primary education. Students could go on to secondary school after having only completed, for example, four years of primary school. This allowed them to repeat several primary classes.

An evaluation report on the impact of these reforms, published in 1994, shows an overall decrease in school retardation between 1975-76 and 1992-93. However, this trend has been much less marked since the late 1980s, and, as shown above (see Tables 5 and 6), such a trend was already visible before 1983. At secondary level, school retardation rates rose from 50 to 61 per cent, although different tendencies can be observed in the different streams of education. In general education, the percentage of pupils held back fell slightly from almost 41 per cent, in 1983-84, to around 37 per cent, in 1992-93. In technical education, in contrast, the opposite effect can be observed. In 1983-84, 75 per cent of pupils were held back by at least one year; by 1992-93, the figure had risen to 80 per cent. Retardation is more evident in vocational education: by 1992-93, the percentage of grade repeaters had risen by 10 per cent, and amounted to almost 87 per cent. Even more alarming is the fact that in the vocational stream, some 75 per cent of pupils are held back from the first grade onwards. This turns vocational education almost into a “relegation stream”.

### **Re-organisation into cycles and definition of attainment targets**

Belgium is now moving progressively towards a different form of educational organisation based on cycles, at the end of which teachers will have to make sure that all pupils have reached a series of

attainment targets. In the French community of Belgium, this will be achieved through a plan designed to set up mastery learning at the primary level. Between the years 2000 and 2005, at the latest, all primary schools must have re-organised teaching into two cycles, ending at age 8 and 12 respectively. Grade repetition will not be allowed in the course of a cycle, and the acquisition of a specific set of skills will be verified at the end of each cycle.

At the secondary level, promotion from the first to the second year has been automatic since 1994-1995. Although the pupils who do not master the competencies required by the end of the second year will have to attend the same class again, they will only work on the skills they have not yet acquired. Students will not be allowed to spend more than a total of three years in the same education cycle.<sup>15</sup>

Finally, a set of “attainment targets” is being developed so that teachers, pupils, parents, authorities, social partners and the public may know what is to be expected from students at the end of a cycle. A draft document on attainment targets has been prepared, based on existing programmes, which will be discussed amongst teachers. This document will lead to an official statement of the skills to be reached at the end of each educational cycle.

Three main conclusions can be drawn from this study on failure at school in Belgium. The first is that failure is closely related to specific cultural, social and political factors. The second is that the development of effective policy to combat failure requires a comprehensive and long term effort. Finally, and stemming from these two points, the implementation of initiatives for overcoming failure will be difficult since it may challenge public misperceptions or deeply entrenched values, especially among teachers, and improving student performance will depend – to a large extent – on a change in teachers’ beliefs and practices.

## **CANADA: PROVINCIAL AND SCHOOL-LEVEL INTERVENTION IN ONTARIO**

The aims of this paper are, first, to examine the failure problem conceptually and politically and, second, to look at policies in Ontario designed to overcome it. The general purpose is to identify key policy issues in this area and to illustrate them with a case example.

### **NATIONAL AND PROVINCIAL CONTEXT**

Education in Canada is the responsibility of the ten provinces, who determine individually their own curriculum, teacher certification, student assessment and standards, school accountability, teacher salaries, policies and regulations regarding teacher education. The federal role is minimal. The Council of Ministers of Education Canada (CMEC) was established in 1967 as a forum to discuss the major challenges in education and to develop common projects. Only recently has CMEC taken a more active stance toward influencing education through developing nation-wide standardised tests and looking for ways to facilitate mobility of students between provinces.

Historically, each province is organised around locally elected school boards whose board of trustees are responsible for appointing the chief superintendent, and for hiring principals and teachers to run the schools within their jurisdiction. The school board is the employer of administrators and teachers, and is funded by a combination of local taxes and provincial revenues. Educational and curriculum policy is formulated at the provincial level, and interpreted and implemented at the local level, within varying degrees of autonomy depending on the area and the province in question.

Ontario is the largest of the ten provinces, situated in central Canada with Manitoba on the west and Quebec on the east. The province has a population of approximately ten million; two million enrolled students and more than 100 000 teachers. Structurally, it has 168 local school boards, some as large as 105 000 students, many in the mid-range of

10 000 to 30 000 students, and a number of very small boards in sparsely populated areas in northern Ontario. The bulk of the population is clustered in cities and metropolitan areas in the south, close to the United States border. There are two publicly funded parallel systems in Ontario – one is the public school system and the other is the Catholic separate school system which is fully funded.

### **STUDENT AND SCHOOL FAILURE**

It is easier to define what student and school failure is than to attribute its causes and more difficult still to agree on policies to combat failure. At the individual level, young people who have left high school before receiving a diploma are considered failures. There is no standard method for calculating high school non-completion rates. In Canada, data on high school non-completion comes from two general sources: administrative records (“graduate rates”, and “apparent cohort drop-out rates”) and survey data (census data, labour force surveys, school leavers studies). It has been calculated, by combining several data sources, that the high school non-completion rate is 18 per cent (Statistics Canada, 1993).

These general statistics mask two problems. First, those that do succeed come disproportionately from more privileged backgrounds. In certain class and ethnic categories the drop-out rate can be 50 per cent or greater. Second, using more demanding standards of student performance produces even greater cause for concern. Newer forms of student assessment focus on performance that relates to students’ abilities to think, to develop an in-depth understanding, and to apply learning to realistic problems both individually and in group settings. There are no comparative measures of how well students are doing in achieving higher standards of thinking, group work and problem solving, but it is likely that only a minority perform well in

this respect. The Ontario Royal Commission on Learning (1995) put it this way:

“The overall achievement of our students is not outstanding. And while many children get an excellent public education in Ontario, it is still true that only a minority achieve what can be called high-level literacy; that a significant minority doesn’t make it through high school; and that among some disadvantaged groups, that minority comes perilously close to, or even becomes the majority.”

School failure (or its positive counterpart school success) occurs when a school does disproportionately worse (or better) than schools with comparable populations. Both effective school research and, more recently, research on “failed schools”, confirm that school characteristics make a large difference in the likelihood of student success. Schools that perform less well lack focus, have individualistic cultures, pay little attention to forms of pedagogy that engage diverse students, do not engage in continuous learning for staff, do not monitor performance and/or do little in acting on results, have limited contact with parents and the community, and do not relate to state policy requirements. There is a consensus on the fact that it is the combination of these characteristics that makes the difference.

The critical differences of opinion arise when it comes to identifying causes and solutions to failure. There are two competing tendencies. On the one hand, there are those who see the cause of failure as poorly motivated and/or poorly prepared students and teachers, working in a weakly led, inefficient and ineffective bureaucracy. On the other hand, there are others who believe that the cause is related to a failure to create the kind of working conditions and incentives to support and enhance the opportunities for both students and teachers to learn. In the policy literature the first orientation has been called “a compliance mindset”, while the second is referred to as a “capacity-building mindset”.

At the strategic and practical levels these two mindsets are not mutually exclusive (indeed they must be combined). At the philosophical and political levels they may, in fact, be fundamentally incompatible. For example, those holding a compliance mindset may not have a strong intrinsic interest in closing the gap between high and low performers. They may be content to pursue “sink or swim” standards of performance, while those sympathetic to capacity-building may eschew any notion of external standards of accountability. It may be gratuitous to

add that many actors appear not to have any articulated strategy for taking action to overcome failure.

## REFORM TRENDS AND STRATEGIES IN ONTARIO

In using Ontario as a case study, two levels of the system will be considered in turn: the provincial and the school board levels. It is important to note as background that the province operated in a loosely-coupled system from the late 1960’s until the mid 1990’s. There were provincial curriculum frameworks with little specificity, there were no province-wide tests (and minimal school and board wide tests), and limited inspection or monitoring of policy implementation. However, as part of the growing concern by governments and society about the performance of school systems, new comprehensive policy reviews began to intensify in the late 1980’s and into the 1990’s. Several provinces established Royal Commissions or province-wide task forces (British Columbia, New Brunswick, Newfoundland, and Ontario).

### The provincial level

In Ontario, a Royal Commission completed its study in January 1995, in a five volume report entitled *A Love of Learning*. The Minister of Education of the government of the day (the New Democratic Party) immediately made a series of policy announcements essentially adopting most of the major recommendations in the report. These policy initiatives largely accepted the seven major areas of the Commission’s recommendations, and added an eighth area:

- a focus on early childhood education, especially for 4 and 5 year olds;
- the establishment of a common curriculum for grades 1 to 9 (ages 5 to 13);
- reform of secondary school curriculum (ages 14 to 17);
- an infusion of resources in technology;
- the establishment of advisory school councils for all Ontario schools;
- the creation of an arm’s length office of Educational Quality and Accountability;
- the creation of an independent College of Teachers;
- the establishment of a task force on the reduction of school boards. This item was considered briefly

by the Commission and rejected as an area of action. The general terms of reference from the minister indicated that the number of school boards – 168 – should be reduced at least by 40 per cent.

Between February 1995, when the policy announcements were made, and September 1996, the Commission went to some lengths to stress that the recommendations must be treated as an integrated set, and that implementation of the rationale underlying the recommendations must become a preoccupation of any follow-through. Concerning the latter, for example, the Commission emphasised that the purpose of school councils was to “mobilise the community as an engine of reform” to help accomplish the work of schools, and that it was not just an exercise to increase community power. The implementation of the policies of the government in the eight areas would have been an enormous challenge (especially if one takes the capacity building criterion) even under conditions of sustained follow-through, but the latter was halted almost before it got started. The Conservative Party was elected with a clear majority in June, 1995 (a mere four months after the policy announcements) on a platform of financial restraint. Before reviewing progress in each of the eight areas, it should be observed that the process since the change of government has been dominated by financial cutbacks, starting with the extraction of 400 million dollars from elementary and secondary school budgets. Consequently, any substantive policy action in the eight areas has been limited or low-key.

First, the Conservative government made it clear that new investments in early childhood education were not a priority. Local school boards could take initiative as they saw fit, but the government would not be establishing policy requirements or incentives. For example, compulsory junior kindergarten (4 year olds) would not be required, nor would special funds be made available.

Second, work proceeded on developing the common curriculum (ages 5 to 15). By the fall of 1996, and for the first time in 25 years, detailed curriculum was produced in the areas of mathematics, language, and second language, with further development work ongoing in science and technology. All of this work is still at the pre-implementation stage. Third, while reform of secondary school curriculum is underway, it is slower and does not have clear, purposeful objectives.

Fourth, the area of technology is very difficult to assess because of the nature of the market. As everywhere, there is an explosion of technology which is largely uncontrolled (nor could it be, or perhaps, should it be). The ministry continues to emphasise technology across the curriculum. For example, the new common curriculum development incorporates technology into the various curricular areas.

Fifth, the policy to create school councils has been established. All schools are now required to have working school councils. The ministry has been developing resource material and activities to support the implementation of councils, including: a handbook of school councils, identification of exemplary practices, facilitating networks of support and professional development. A school council does not of itself make an impact on failure, but it can play a useful part in implementing parallel measures, such as: in-service training and support for council members in group decision-making, conflict management and problem-solving for school improvement, parent education activities, use of parent and community circles, home-school curriculum support strategies (*e.g.*, family math), and the co-ordination of work with community agencies (see Epstein, 1995).

Sixth, the office of Educational Quality and Accountability was established by an Act of Parliament in June, 1996. Its role is to develop, implement and report on assessment in all major curricular areas starting with grades 3 (age 8), 6 (age 11) and 9 (age 13). It is at the early stages of its work and faces several challenges: establishing the assessment tests, determining its relationship to the Ministry of Education integrating its work with other initiatives such as linking assessment to curriculum objectives and to standards for teacher education.

Seventh, the College of Teachers was also established by an Act of Parliament in June, 1996. The College of Teachers will be an independent body which will maintain a register of all licensed teachers, determine criteria for accreditation of teacher education programmes, consider standards for what teachers should know and be able to do, develop a framework for ongoing professional development of teachers and administrators, and generally oversee admission and exit of who is in the teaching profession. The College will be governed by 31 members (17 elected and 14 appointed), and had its first meeting in early 1997. The College of Teachers is only the second in North America. There are no comparable examples

in the United States, and only one other in Canada: the British Columbia College of Teachers, founded in 1990. The British Columbia College's jurisdiction does not encompass the in-service professional development of teachers and administrators.

Eighth, and finally, the Task Force on the Reduction of School Boards has recommended reducing the number of school boards by 50 per cent. The government went further than this in legislation passed in April 1997, reducing the number of boards from 168 to fewer than 70. Other provinces have also reduced the number of local school boards, like Nova Scotia. New Brunswick, indeed, announced in February 1996 the elimination of its school boards, to be replaced by local parent councils.

Using Ontario as a case example, what can we conclude about the development of policies to combat failure at school? First, political continuity or discontinuity is obviously an important contextual variable. A new government in Ontario imposed different priorities. This is neither good nor bad in itself, but it does make a difference. Second, while developments in Ontario are still at the early stage of implementation, and therefore their impact cannot easily be determined, the content of these initiatives can be assessed in terms of their potential for directly or indirectly overcoming failure. At this time, the policies are mostly structural: curriculum development, school councils, accountability office, college of teachers, numbers of school boards. In the conclusion of this paper the question of substance of policies will be raised in more of a normative and comparative manner.

### **The school board level**

One must consider the policy role of school boards in order to understand what might be needed to address student and school failure. There are 168 school boards in Ontario. Each has 15 or more elected trustees who appoint the Director of Education, employ all teachers and other staff, and assume responsibility for implementing provincial policy and responding to local needs. School boards vary in their proactivity and capacity to address failure, and they are clearly crucial in the current structure of Ontario. The Durham Board of Education, east of Toronto, will be used as a case vignette of what a relatively active school board can do.

The Durham Board of Education is a large school district with 92 elementary schools, typically

with 300-600 students each, and 19 secondary schools, typically with 800-1200 students each. From senior kindergarten (age 5) to grade 12 (age 17) the school day is normally 9 a.m. to 3:30 p.m., although many schools offer integrated day-care which extends the day from 8 a.m. to 6 p.m. The drop-out rate – those leaving high school prior to completion of Grade 12 – is approximately 4 per cent. Students pursuing further education enter either a community college of applied arts and technology for two to three year programmes, depending on the diploma, or enter university for a three or four year undergraduate programme.

The Durham Board began with major reform initiatives in the late 1980's. It was a founding member of the Learning Consortium in 1988: one of six partners involving four school boards and two higher education institutions. The objectives of the Consortium were to pursue long term teacher development linked with school development for the purpose of enhancing the quality of teaching and learning. Both within, and independent of the Learning Consortium, Durham has intensively pursued the objective of continuous and comprehensive staff development which is the key to its system evolution. The range of staff development is quite extensive and provides in-depth training for teachers, based on strong research topics. The programme has grown from participation in one institute, in 1988, to the involvement of well over 3 000 educators (over 75 per cent) in the system, in cumulative professional development and follow-through focusing on co-operative learning, conflict resolution, models of instruction, school growth team and leadership training, technology, and monitoring and assessment of impact.

During the same period, structural changes were made to focus on school based planning and central office reorganisation to support school planning and co-ordinate system priorities. Since 1988, the Durham Board has developed and reviewed its System Plan and strategic directions three times. On each occasion all members of the Durham educational community (teachers, administrators, students, parents, business people, and other board personnel) reflect on what Durham has done well and consider strategic direction. There are six main components to the current System Plan: teaching and learning, technology, school based planning, partnerships, professional development, and resources. School growth plans focus on key directions of the schools within the context of board and

ministry parameters. This gives each school the opportunity to engage all stakeholders in decision making and planning about the improvement agenda for the school. The process allows schools flexibility to adopt particular areas of emphasis, while ensuring the school's best efforts will be directed to the teaching and learning practices in the classroom. The system is also committed to partnerships with parents, community organisations and businesses. During 1995, the Durham Board participated in over 400 community partnership initiatives. The newly formed school councils provide another mechanism for planning, mobilisation, and accountability between schools, parents, and the community.

Durham has moved from being one of the least innovative and effective boards in Ontario (CEDDS review 1981-82) to one of the most innovative in 1996. The district has been committed to and has engaged in continuous inquiry and dissemination. Over the past three years, Durham has administered a student attitude survey – which includes key aspects from effective schools research with particular emphasis on school climate, teaching and assessment strategies, and curriculum – to every secondary student (grades 7-12). In addition, the district has ranked in the top five out of 168 boards in recent performance based assessments of the writing and reading abilities of all grade 9 students in the province. Durham is proactively pursuing performance based measures, and is among the leaders in Ontario at establishing multiple measures of performance. It is pursuing a “co-ordinated decentralised” approach to making changes in the district to support change at the school level. A strong emphasis is placed on building the capacity at the school level to establish school councils, plan with local communities, develop the skills of all students, and engage in productive partnerships at the community, district, and external levels. While many initiatives are underway, there is a high priority placed on integration of innovations for coherent, cumulative development.

This brief case study shows clearly that a school board has the potential to play a dynamic role in promoting school improvement. While the Durham Board initiatives have operated within the broad context of province-level initiatives, the board has taken advantage of its autonomy to make a distinctive and constructive contribution to the improvement of education, in particular by drawing upon the energies of the local community. However, not all

boards are like Durham. Although institutional arrangements in Ontario allow boards the freedom to develop this sort of dynamic role, this autonomy also permits school boards to be relatively ineffective – as Durham once was – because, unlike England and Wales and unlike several states in the United States, there is no central assessment of the work of school boards based on performance measures.

## POLICY IMPLICATIONS

There is a large amount of evidence that shows that certain kinds of children not only enter school at a great disadvantage but fall further and further behind intellectually, emotionally, and socially. This shows up at a very early age with the remarkable observation that one can predict high school drop-out as much as ten years before it occurs (Offord *et al.*, 1991; CIAR, 1992). Compounding the problem is the limited school relevance (both in terms of learning and in terms of personal connection with adults) for large numbers of high school students (de Broucker, 1996). Therefore, one set of policies must focus on pre-school readiness for all children and parents. The Ontario Royal Commission on Learning (1995) contains an excellent analysis of the need for policy intervention at this level, although Ontario has not yet taken such action.

Second, the nature of curriculum, teaching and learning experiences throughout the grades must change to focus on teaching for understanding for all students, and on fostering personal connections among students and between students and adults. Newmann and Wehlage (1995) provide compelling analysis and evidence of what difference a school can make if it engages in “authentic” pedagogy, *i.e.* teaching that requires students to think, understand and apply ideas to realistic problems: students achieve more both on traditional tests and on performance based tests. This is a tall order because it involves changing not only the structure of the curriculum and the school, but also the culture of the school. The problem is greater at the secondary level, but serious as well at the elementary level. Radical reorganisation of schools is needed relative to the grouping of students, the training of teachers and the culture of learning (Fullan, 1996).

Third, changes in local governance form part of the policy solution. School councils and other forms of community school relationships are needed to increase the influence of parents and community,

and mobilise more adult resources to improve the educational experiences and motivation of students.

Fourth, new policies are needed in the assessment system and the definition of standards of performance for students and teachers at all stages and levels. The latter should include revamping teacher and administrator preparation programmes and standards of performance for graduates, for teachers beginning their careers, and for the continuous professional development of teachers and administrators. It is critical that any policies in the domain of teacher development include mechanisms and incentives for the professional development of educators in relation to expectations.

Fifth, in addition to assessment systems for students and teachers, accountability mechanisms are needed at the local and state levels. At the individual school level this can include school development plans mutually agreed upon by local authorities and schools. Schools that do make a difference in combating school failure have collaborative work cultures with groups of teachers and students that take collective responsibility for altering teaching and monitoring student performance, and develop school-based plans accordingly. At the state level, this can include systems of review.

These five policy areas – pre-school; curriculum; teaching and school organisation; local governance; standards and assessment of students and educators; and local and state accountability systems – indicate how comprehensive the policy set must be in order to effectively address student and school failure. Having the right policies developed is less than half the battle. It is a necessary, but not sufficient condition for reform. One can have the entire set of “formal policies” in place without making any difference to student and school performance. What makes a difference is when the formal policies and the capacities of students and teachers

interact in mutually reinforcing ways. To take an example, the availability of assessment data means little unless students, teachers and others derive shared meaning from the information, and have the capacity (skills, motivation, resources) to act on it. Both top-down and bottom-up strategies must be built into the policy mix. Compliance pressure and capacity support need not work at cross purposes and must not be mutually exclusive.

This brief case study on Ontario does not attempt a comparative analysis across Canada. However, the policy concerns across English speaking Canada and many of the states are similar in content to those found in the Ontario case. Many of the states have gone much further in assessment and accountability including naming “failed schools” which require corrective action. Studies by Leithwood *et al.* (1995) in British Columbia show that state level policies can provide a stimulus and framework for action, but that implementation depends on local capacity at the school and district level. There are no studies that demonstrate how policies can help increase local capacity on a comprehensive basis. Put another way, there are many pockets of success stimulated by policy, but nothing of any great scale.

There is more and more experience in the OECD countries with the individual policy components which are necessary to combat school failure. The challenge over the next decade is twofold. First, how to integrate the key policy components so that they actually interrelate and feed on each other as a coherent set. Second, how to combine top-down and bottom-up energies so that the requirements of accountability and the power of capacity-building work together. The work in the past decade has put us in a better position to tackle these daunting but urgent tasks.

## **JAPAN: UPPER SECONDARY SCHOOL DROP-OUTS**

In Japan, as in other OECD countries, there is some reluctance to acknowledge the problem of failure at school. When the problem is acknowledged, it is not always easy to agree on the indicators of failure that would demonstrate its scale. This paper will focus on students who drop-out of secondary education, and will examine the recent reform of upper secondary education, which seems to offer a promising means of resolving the issue.

### **FAILURE AT SCHOOL IN JAPAN**

It is widely believed that primary and secondary education have been relatively successful in Japan compared with other major advanced countries. Participation in compulsory education has been almost 100 per cent since the end of World War II, and the proportion of pupils going on to upper secondary education, which is still voluntary in Japan, has been over 95 per cent since the 1980s. Public expenditure on primary and secondary education, as a proportion of GNP, is at about the same level as in other comparable countries.

Although local authorities are responsible for running their primary and secondary schools, the Ministry of Education, Science, Sports and Culture (Monbusho) has played an important and active role in the administration and financing of primary and secondary education. For example, Monbusho lays down national curriculum standards for primary and secondary education to secure an optimum national level of education, based on the principle of equal educational opportunity for all. A "course of study" for each school level specifies broad objectives and standard content for all subjects. Monbusho has revised this course of study several times since the end of World War II, most recently in 1989. The main goals of the new course of study for upper secondary schools, for example, include fostering the willingness to learn independently and the ability to cope positively with social change, thus enhancing the ability of the education system to develop the individuality of students. In order to respond appropri-

ately to students' diverse needs and to social change, it calls for the encouragement of educational activities that make use of the ideas, ingenuity, and distinctive characteristics of individual schools.

Monbusho has various means of improving teacher quality, including not only the teacher certification system and the in-service training system, but also financial measures. To attract high quality people to the realm of education and so maintain and improve the standard of education, a law was enacted in 1974 which improved teachers' salaries compared with those of other public employees. Becoming a teacher is now one of the most attractive career-paths for young people, and the teaching profession is highly respected throughout Japan. Furthermore, in the area of compulsory education, one half of the salary of the public school teachers, employed by local authorities, is paid by Monbusho. This system makes it possible for local authorities to deploy the necessary number of teachers (determined by a formula set by Monbusho) without being constrained by the local financial situation.

As a result of these efforts, students' proficiency levels in primary and secondary education in Japan have been relatively high compared with those of other OECD Member countries. Several international comparisons organised by the International Association for the Evaluation of Educational Achievement (IEA) show that Japanese children achieve high scores, sometimes the highest, in mathematics and science. The availability of well-educated young people can be regarded as one of the reasons for high Japanese economic growth in the 1960s and 70s.

On the other hand, there are some serious problems in the education system such as bullying, school violence, refusal to attend school, and upper secondary school drop-outs. Amongst these, the bullying problem has recently attracted particular publicity, because it has led to student suicides at

some schools. Often, data on bullying are scarce and anecdotal, making this a difficult subject to analyse. According to a Monbusho survey, however, about one-third of lower secondary schools and a quarter of upper secondary schools reported the occurrence of bullying, both physical and verbal, in the fiscal year 1993. Preventing this has become a top priority in school management and student guidance in Japan.

Data are more readily available on upper secondary school drop-outs, a serious problem in Japan, as in other OECD countries. A significant number of young people abandon school whether before the end of compulsory schooling or before the end of upper secondary schooling, without a diploma or the appropriate skills and competencies to manage the transition to further education or the labour market. This problem has become a major focus of government policy, and a major reform of upper secondary education has recently been undertaken to remedy it.

## UPPER SECONDARY SCHOOL DROP-OUTS

In Japan the six years of primary education and the three years of lower secondary education are compulsory. Unlike some European countries, these nine years of education between the ages of 6 and 15 are a so called "single track" comprehensive system in which all children, except those who go to special schools for the handicapped, go to a uniform type of school.

Upper secondary education is voluntary, but those seeking to enrol in it must pass an entrance examination. In the early 1950s, about one half of the young people who finished compulsory education went straight into employment. Throughout Japan's era of high economic growth in the 1960s and 70s, however, upper secondary education expanded rapidly, driven by the concept of equality of opportunity and by strong public enthusiasm for education. The percentage of students entering upper secondary schools rose from about 40 to 50 per cent in the mid-1950s, to 70 per cent in the mid-1960s, and to over 90 per cent in the mid-1970s. In the fiscal year 1995 it reached almost 100 per cent.

Upper secondary education is divided into two broad categories: the general course, and vocational or other specialised courses. Some upper secondary schools also offer part-time (day/evening) and correspondence courses to young workers who wish to

acquire upper secondary education while working. One can therefore find a great diversity of abilities and interests among the student population of upper secondary schools. In spite of this diversity, the percentage of students aiming for higher education has grown from around 60 per cent in the 1970s to 75 per cent in the 1990s.

A Japanese newspaper reported that in 1983, more than 110 000 high school students dropped out. This figure was equivalent to the number of students enrolled at 127 high schools (*Asahi Newspaper*, 1985). Shortly thereafter, the National Council on Educational Reform published its first report, in June 1985. The Council, set up on the initiative of the Prime Minister, declared in its report that various problems in primary and secondary education had created a state of "desolation in education" despite the quantitative expansion of the system, and pointed to the ill effects of a "uniformity-oriented" educational system.

The Council attributed these problems, including that of upper secondary school drop-outs, to a social climate that attached too much importance to the educational background of individuals, to excessive competition in entrance examinations, and to an inadequate response from the educational system to the diverse motivations, aptitudes and interests of students. One of the Council's key proposals was a "credit-based upper secondary school" along with new curricula and methods of learning.

Monbusho started to monitor the drop-out rate at upper secondary schools in the early 1980s. In the fiscal year 1994, the number of drop-outs from public and private upper secondary schools totalled 96 401, or 2 per cent. As one can see in Table 1, the ratio is a little lower than the 2.4 per cent of a decade ago but Monbusho recognises that it remains serious.

Reasons for dropping out vary from student to student and in many cases a complex mixture of factors is involved. The most frequent reason is the desire for a "career-path change", which has been cited by an increasing number of students over the years (now 43 per cent). More than half of those who wish to change their career-path want to enter into the work force; the rest simply want to transfer to different upper secondary schools. The second most common reason invoked by those who drop-out before the end of compulsory schooling is the "inability to adjust to school life and school work" (27 per cent).

Table 1. **Drop-out rate in upper secondary education**  
(Percentage)

|      | All | General | Vocational | Day/evening<br>(part-time) |
|------|-----|---------|------------|----------------------------|
| 1982 | 2.3 | 1.5     | 2.9        | 15.5                       |
| 1983 | 2.4 | 1.5     | 3.0        | 16.2                       |
| 1984 | 2.2 | 1.5     | 2.8        | 15.9                       |
| 1985 | 2.2 | 1.5     | 2.8        | 17.0                       |
| 1986 | 2.2 | 1.4     | 2.6        | 16.3                       |
| 1987 | 2.1 | 1.4     | 2.6        | 15.7                       |
| 1988 | 2.1 | 1.4     | 2.6        | 15.4                       |
| 1989 | 2.2 | 1.5     | 2.8        | 15.9                       |
| 1990 | 2.2 | 1.5     | 2.8        | 15.8                       |
| 1991 | 2.1 | 1.4     | 2.7        | 14.6                       |
| 1992 | 1.9 | 1.3     | 2.6        | 14.0                       |
| 1993 | 1.9 | 1.3     | 2.5        | 13.9                       |
| 1994 | 2.0 | 1.4     | 2.7        | 14.0                       |

Source: Monbusho (1996).

The drop-out ratio differs from course to course. The highest level is amongst students enrolled in part-time courses. Within full-time courses, the level is higher in vocational courses than in general courses. The drop-out rate is higher in the first year of upper secondary school than in later years, which points to a need for better guidance during the transition from lower to upper secondary school. Enrolment of students in vocational courses because of low scholastic scores, regardless of readiness and aptitude, may be a factor in causing drop-out, especially in the first year. The same may be true of enrolment in the general course without a clear perspective on the student's readiness for taking general academic subjects.

Where do upper secondary drop-outs go? According to a special survey carried out by Monbusho in 1991, of 6 000 young people who had dropped out of upper secondary schools in 1989, 64 per cent were working, full-time or part-time; 14 per cent were studying again at upper secondary schools or at special training colleges to get skills necessary for work; and only 6 per cent were unemployed. Those who had left in order to make a "change in career-path" were more positive in attitude and were therefore more likely to be employed or engaged in further studies than those who cited "poor adjustment to school life" as the reason for dropping out. Finally, 31 per cent of those who had graduated from upper secondary school advanced to higher education, 16 per cent entered into special training colleges, and 35 per cent went into employment. These figures reflect a great difference between those who dropped out and

those who finished upper secondary education successfully.

Monbusho's Working Group on the "Problem of Inability to Adjust to School Life" analysed the background to the upper secondary school drop-out phenomenon in its report of 1994, drawing on the advice of experts. The first main finding of the report was the lack of appropriate guidance and advice to students in order to help them understand the implications of dropping out before finishing their studies, or to support them in planning their future career-paths. The second finding was that secondary schools tend to be uniform in curriculum structure and implementation, resulting in insufficient provision for students' diversity of abilities and career interests. In particular, it highlighted the negative effects of grade repetition at the upper secondary level, since it implied holding back students who failed to get the required credits in only one compulsory subject<sup>16</sup> and therefore triggered many drop-outs. In addition, the report pointed out the need to support those students who dropped out because of their family background: some of these young people lacked the learning skills necessary to adjust to school life, while others could not cope with the burden of high expectations from their parents.

The report urged more flexibility in the grade promotion system, and in enabling students to transfer more easily from one course to another, and from one school to another. It made the point that, while some students drop-out because of low achievement, others make a positive decision to change their career-path and leave upper secondary school to take up employment or to transfer to other schools. This implies that the drop-out phenomenon is not all negative.

## MEASURES TO SOLVE THE PROBLEM

Since the mid-1980s, Monbusho has devoted much effort to creating a flexible framework for upper secondary education in order to be able to address the serious drop-out problem at this level. In 1989, it carried out a revision of the course of study which first applied to entrants in the fiscal year 1994. Its aims were to broaden students' options, increase flexibility in teaching and learning, and facilitate grade completion and certification. Students could graduate provided they had accumulated the required number of credits by the time of graduation. Those who had failed only a few subjects were not held back but, instead, could take the

failed subjects the following year. They could also choose their options amongst a wider variety of subjects.<sup>17</sup>

A broad reform of upper secondary education was set in motion in April of 1991. It responded to a strongly felt need that this level of schooling should respond more flexibly to students' diverse needs, to the requirements of an internationalised, information-oriented society, and to technological innovation in various fields.

Until then, upper secondary schools were evaluated primarily in terms of the number of their students who got into universities and colleges, notably the most prestigious like Todai (Tokyo University). The admission to upper secondary school was based on student achievement scores rather than on their interests and abilities. This perception of a "ranking" of schools was closely related to the strong preference of both students and their parents for enrolment in the general course leading to higher education, rather than in vocational courses. This attitude is summed up in the journalistic term "Fu-noko-sho". Taken from the feudal Japanese social class "Shi-no-ko-sho", the "fu" refers to the general course which is regarded as superior to the "no-ko-sho" (vocational courses). This excessive competition for entering "good" schools leads to student dissatisfaction, and was recognised by Monbusho as one of the main causes of the drop-out problem. Moreover, the sharp demarcation between the general and the vocational course made it difficult to provide general course students with a wide range of vocational choices, or to offer vocational course students a variety of subjects related to general education.

The Central Council on Education – an advisory body to the Minister of Education – made three main recommendations to the minister on the reform of upper secondary education:

- Instead of the quantitative expansion of the past, efforts should now focus on qualitative enhancement to allow an adequate response to students' individual needs.
- Students should be able to choose from among a wide range of schools, courses, and subjects in order to correct the tendency to employ uniform approaches to educational content and guidance methods.
- Excessive competition in entrance examinations should be avoided by diversifying the selection criteria.

However, even the new, more flexible system did not respond adequately to the needs of general course students who wanted to enter into the workforce upon graduation, nor to the needs of vocational course students who wished to proceed to higher education. Therefore, on the recommendation of the Central Council on Education, an integrated course system was introduced in 1994, in addition to the traditional general course and vocational courses, encompassing elements of both. It aimed at giving students an awareness of their own career-paths, including their future choice of occupation. The integrated course was introduced in seven upper secondary schools in 1994, and in an additional 16 schools in 1995.

After launching a comprehensive research project on the problem of upper secondary school drop-outs, Monbusho reiterated in its 1995 White Paper on Education:

"Measures to solve the drop-out problem are closely related to the diversification, individualisation, and increased flexibility of upper secondary education. The most important priority is to develop attractive schools in which students can study enthusiastically and with a sense of fulfilment. This task needs to be approached from a variety of angles. First, curricula must be structured so as to offer a wide range of learning opportunities. Second, guidance must be provided in accordance with individual students' needs. Third, since grade repetition triggers many drop-outs, more flexibility should be introduced in the grade promotion system. Fourth, mechanisms should be put into place so that drop-outs who wish to return to upper secondary school can be encouraged to do so. In sum, the drop-out problem requires a comprehensive response as part of an ongoing reform of upper secondary education" (Monbusho, 1996).

Lastly, a new social survey on school drop-outs was carried out in 1996, which asked students about their experience at school, the circumstances under which they dropped out of school, and their subsequent careers, including employment.

## POLICY IMPLICATIONS

Since the beginning of the 20th century, the Japanese people have been aware of the usefulness of educational qualifications in raising their economic and social status. Post-compulsory education,

however, did not expand until post-war educational reforms changed the school tracking system from a European double-track to an American single-track. Since then, equality of educational opportunity has not only been a constitutional right but also the subject of strong popular demand. On occasion, the concept of equality of opportunity has been extended to encompass “equality of results”. Such concepts were partly encouraged by the popular belief that effort alone can compensate for differences in ability.

Although the uniformity of Japanese education is now changing towards a more diversified system, for a long time young people preferred to take the same educational path as others until the competitive entrance examination forced them to diverge, fearing that not to do so would harm their future chances. The “best career path” was believed to be that which led from good schools (universities and colleges) into big enterprises. This myth was reinforced by so-called “Japanese-style employment”, i.e., students only get one chance to find employment with big companies, which occurs when they graduate from school. In this context, leaving school without a diploma might be seen as an “aberration”.

During the Cold War era there were serious disagreements between the ruling Liberal Democratic Party, the opposition Socialist Party and the Communist Party, over basic educational policies on school administration, curriculum, teacher training and textbooks. This was reflected in a conflict between Monbusho and the Teachers' Union. Nevertheless, the fundamental concept of equality of educational opportunity was supported by both sides. The rapid expansion, first, of upper secondary education, and then of higher education, made it possible to support this idea, just as Japan was successful in overcoming other social contradictions by a rapid rate of economic growth which gave some benefits to all. However, the conflict between theoretical equality and the actual diversity of students' abilities, interests, and aspirations generated many

problems, including school drop-outs and bullying, which came to be regarded as the cause of “desolation in education” by the National Council on Educational Reform.

The Japanese post-war political and economic situation began to change in the 1980s. People became more aware of the importance of diversity as well as equality in education. It was a great shock for an education community with a traditional way of thinking when the National Council on Educational Reform criticised the uniform character of Monbusho's policy. This criticism was on a completely different plane to the traditional grounds of confrontation between Monbusho and the Teachers' Union.

The end of the Cold War accelerated the pace of educational change. Confrontation also changed from the government versus the teachers' union or the government versus parents, to parents versus schools or parents versus teachers. Today, most people support Monbusho's policy of introducing more diversity into the primary and secondary system, and they think schools and teachers should respond more flexibly to the drop-out and bullying problems. These new consumer-supplier tensions may generate new educational problems and aggravate existing ones.

In this new situation, the role of Monbusho also has to change. Its main task should no longer be the management of schools but the development of a broad framework within which local authorities and schools can solve their own problems. In such a system, continuous monitoring and evaluative research are essential for improved policy making. From World War II until recently, research on educational administration, finance, organisation, and management have tended to be too political, too descriptive and insufficiently analytical.<sup>18</sup> The extensive studies discussed in this paper on the drop-out problem in upper secondary education indicate a move in the right direction.

## SPAIN: THE NEED TO ACKNOWLEDGE FAILURE

The issue of failure at school has only come to the fore in Spain in the past decade, when major education reforms have offered an opportunity to substantially raise student achievement. Yet despite evidence of widespread poor attainment, combating failure remains a difficult task, since the problem itself is not widely accepted, and substantial barriers have to be overcome, not least the attitudes of the teaching profession.

### EDUCATIONAL REFORM

A systematic attempt to address the problem of failure at school, which only arose in Spain in the late 1980s, bore fruit with the 1990 Law on the General Structure of the Educational System. Up to that point, the school system had been governed by the General Law of Education of 1970, one of the last and more progressive measures of the Franquist era, which had made schooling compulsory from the ages of 6 to 14. While the Socialist administration elected in 1982 soon engineered a much needed “scholastic peace”, by creating a “double network” of state schools and publicly-funded private schools, it was not until 1987 that the quality of education became a dominant issue in public debate.

In response to this debate, proposals for reform were presented by the Ministry of Education in the form of a White Paper (*Libro Blanco*). This was the first official document to recognise expressly that a high proportion of students left school before the end of compulsory education, and that there were high rates of failure in upper secondary school – mainly in the first year – and in professional training (FP).<sup>19</sup> The White Paper suggested that reductions in the number of drop-outs and increases in students’ general attainment could serve as indicators of improvement. Yet the underlying concept of failure was not clear: it seemed to be defined mainly as grade repetition and inability to obtain a graduation certificate at the end of compulsory schooling. The 1990 law to which this led instituted free, compul-

sory education up to the age of 16; it restructured schooling, with a new and compulsory secondary stage between the ages of 12 and 16; it introduced a short, two-year baccalaureate which included different vocational streams at the upper secondary level. Even the vague concept of failure used in the White Paper was omitted from the legal norms underpinning the new structure, which referred simply to improvement in the quality of education.

It has taken a number of years to implement the new arrangements. Only in June 1996 did the first cohort of students reach the end of the new system of primary education, and the new arrangements for secondary education came into force in the same year. The data used in the following analysis therefore refer (unless otherwise indicated) to the pre-1990 structure.

### THE BACKGROUND TO FAILURE

The main contributors to failure – low achievement and dropping out of school – appear to be the evaluation of students during their school career and the qualifications they ultimately receive, and their socio-economic background. Perrenoud (1990) and others have spoken of the “social construction of success and failure” at school; success or failure created, first and foremost, through the evaluation process and the system of qualifications. How students are evaluated has a direct impact on almost all manifestations of failure at school.

In Spain, responsibility for evaluation – and, consequently responsibility for some manifestations of failure – lies with teachers. Under the laws of 1970 and 1990, the head teacher (or *tutor*) has almost total authority over the final qualifications awarded to primary school students, under a system of continuous and formative assessment. At the secondary level and in professional training, that responsibility belongs to the teacher in charge of each discipline. True, the final decision whether a student will repeat a year of study is taken collectively by all the teachers in charge of a group of students, but it is

rare for them to oppose the decision of the teacher in charge of a particular subject or discipline. The school director, who is elected by the school council, has very limited influence in this area.

The curriculum set out in the law of 1990 laid down new evaluation criteria, in order to reduce the degree of discretion enjoyed by teachers, standardise the attainment levels required of students, and create a culture of evaluation which until then had not existed in Spain. It clarified issues such as how various aspects of learning should be evaluated, and in which ways the evaluation of students should be related to evaluation of the curriculum and the practice of teaching.

The creation of that broader evaluation culture, however, has been a slow process. Public opinion and teachers take it for granted that evaluation is solely concerned with the students, and not with the effectiveness of teachers, of the curriculum, of schools as institutions, or of the educational system as a whole. One way of overcoming these barriers is through training. In recent years there have been changes to initial teacher training and to teacher recruitment, and much effort has been put into in-service training for teachers. Yet to date, participation in in-service training has been varied; it has been high amongst primary teachers, but low amongst high school teachers. Although there are notable differences from one high school teacher to another, an overall culture of evaluation is still lacking in Spain.

Research on the link between socio-economic factors and failure has also been very scarce. The evidence is fragmentary and disparate; and the few studies which exist tend to reflect mostly popular perceptions about the failure problem. For example, a survey of the teachers' views on the reasons for failure at school cites indiscipline, indifference or truancy on the part of students as main "causal" factors (García-López, 1994). Yet the research does show that in some deprived areas, such as the suburban areas of big towns, failure is more prevalent than elsewhere. A study of failure at a school in South Madrid reports that 30 per cent of students do not finish compulsory schooling – almost 10 per cent above the national average – and that the percentage of students who do not progress to baccalaureate or FP-1 courses is between 10 and 15 points higher than the national average (Casas *et al.*, 1996). Another study of more than 5 000 14-year-old students shows that their performance in language and mathematics is closely linked to their socio-

economic background, and to the education level of their parents (Jiménez, 1988; see also Carabaña, 1993).

The Institute of Research and Educational Documentation (CIDE), an off-shoot of the Ministry of Education, funded more than 60 investigations of academic achievement and failure at school in the period 1982-93. Dissemination of these data could provide a valuable profile of the problems of failure at school in Spain.

## INDICATORS AND EXTENT OF FAILURE

Failure in Spain is usually defined in terms of various indicators, which reflect different manifestations of the problem. While all of these indicators are perceived as reflecting failure on the part of the student, they also reflect failure on the part of schools and of the education system as a whole. Five main indicators will be discussed in this paper:

- failure to succeed in the assessment at the end of a stage of education;
- being made to repeat a year of study;
- consistent low achievement;
- dropping out of school without obtaining a qualification;
- failing to pass the university entrance exams.

*Failure to achieve the relevant qualification at the end of a stage of education.* Under the law of 1970 (i.e., the system now being phased out), compulsory education ended at the age of 14 with an assessment as to whether the pupil could be considered a "school graduate". A positive assessment was required to go on to the baccalaureate. Throughout the past decade the rate of failure at the end of compulsory education has remained constant at around 20 to 25 per cent of the total student population.

*Repeating a year of study.* In Spain, the general principle is that pupils automatically progress from one year to the next, or from one cycle to the next. At the primary level, pupils cannot be required to repeat a year of study without the consent of their parents. Consequently, repetition is barely 1 per cent in any year. Secondary grade repetition is much higher, however: nearly 10 per cent in each of the three years. So, cumulatively, some 40 per cent of students repeat a year of study at some point. In post-compulsory education, the percentage of students repeating a year is higher still: in the baccalaureate, it is between 18 and 25 per cent, depending on the course; in the second level of Professional

Training (FP-2) it is between 28 and 30 per cent; and in the first level of Professional Training (FP-1), the rate is the highest in the whole system, up to 50 per cent (Consejo Escolar del Estado, 1995).

*Low achievement* in school can be gauged in terms of the failure of students to obtain certain grades or qualifications in particular areas or subjects; in practice, low achievement is closely associated with grade repetition. Since Spanish compulsory education operates on a principle of global evaluation across curricular areas, it is difficult to differentiate low achievement from the probability of repeating a course. Low achievement becomes distinguishable from grade repetition only at the levels of the baccalaureate, professional training, and in the last years of compulsory education, where progression to the next course is possible even with poor achievement in one or two disciplines. Some 25 per cent of pupils in the last year of compulsory education, and 29 per cent in the penultimate year, pass on to the next course. The equivalent percentages are 20 per cent in FP-2 and 22 to 25 per cent at the baccalaureate (Consejo Escolar del Estado, 1995).

*Dropping out of school* is most common amongst those students who have not obtained the "school graduate" qualification at the end of compulsory schooling (whether or not they have repeated a year). In Spain, as in other countries, the proportion of young people who attend school has increased: the number of young people aged between 14 and 17 at school tripled between 1965 and 1985. The drop-out phenomenon is the downside of this extension of compulsory education.

*Failure to pass the university entrance examination.* This is a universal, standardised examination that all would-be students must pass, even if they are planning to attend one of the few private universities. Students are assessed by a team of university professors and high school teachers. Some 85 per cent of students pass this examination. It is important to understand, however, that high schools effectively carry out a previous screening operation. Only students with positive assessments in all disciplines of the baccalaureate are allowed to sit the examination, which in practice excludes between 30 per cent and 40 per cent (sometimes more) every year.

## SOCIAL PERCEPTIONS OF FAILURE

These different manifestations of failure are interrelated, and they broadly affect the same group

of students. However, public and pedagogical opinion in Spain attaches differing degrees of importance to each of them. Failure to obtain "school graduate" status at the end of compulsory education is rightly considered by educational authorities as the most salient expression of failure at school. It summarises the cumulative failure of schooling in the preceding years, and is likely to prompt the students to drop-out of education without having achieved the qualifications and skills needed for the labour market.

Yet failure to obtain "school graduate" status is not seen as a dramatic setback, either by students or by their families. There appear to be several reasons for this apparent paradox. Firstly, such students (and their families) are likely to have experienced failure at earlier stages of schooling: they will probably have been made to repeat at least one year of study at some point. Secondly, pupils who have repeated at least one year of schooling are likely to reach the school leaving age before reaching the end of lower secondary education, and so may often drop-out voluntarily. Thirdly, young people who wish to continue their studies are still allowed to go into the first level Professional Training, even without a school graduate qualification.

In contrast, the experience which students and their families find most frustrating is that of being required to repeat a year of study. In the early years of schooling, this has the added drawback of separating the pupil from his or her classroom companions at a stage when the latter, together with the family, are the main points of social reference. Parents often refuse their consent for primary pupils to repeat a year, which accounts for the low retention rate at that level. This sense of frustration is less acute at the baccalaureate and professional training levels since repetition is more frequent at this level, which means that a student is unlikely to be the only one in the class to be held back and will therefore not lose every classmate.

In any case, grade repetition does not seem to fulfil its intended function in terms of improving student attainment. Far from helping to avoid failure at school, it seems to be one of its causes: it is a predictor both of non graduation and of dropping out at the age of 15 or 16. Hence, the provision in the law of 1990 that allows the automatic promotion of pupils from one cycle to the next, and the automatic progression of pupils at the end of compulsory schooling.

Dropping out of school between the ages of 15 and 18 is usually a consequence of previous consistent low achievement. While the students' families may perceive it as an added form of failure, young people often drop-out voluntarily to look for a job, or because they are bored by school. In lower-income families, dropping out of school is not interpreted as a failure but as a means to join the labour market, even though the young person might often be under the legal age for work and in precarious or illicit employment.

The university entrance examination results attract tremendous media attention in June and September every year. These become all the more important because an increasing number of faculties operate a *numerus clausus* system. Obtaining a place at university which does not correspond to the first or even the second choice of the student can therefore be taken as another manifestation of "failure". This phenomenon attracts more attention than the generally submerged problem of pupils who drop-out of school or leave without qualifications.

Failure to enter university is usually attributed to the nature of the entrance exam. It is generally considered that the university entrance exam does not evaluate the scholastic maturity of students, but rather acts as a screening device – indeed, it is often referred to as a "selectivity exam". It is also generally believed that there is a strong element of luck and that the exam, while not unfair, is a lottery. This is in fact untrue, since there is a high correlation between baccalaureate scores and the examination scores. Surprisingly, though, public opinion rarely comments on the prior exclusion of one-third or more of the students from high school, mentioned earlier.

The perception of this exam as a lottery means that failure is rarely attributed to the students, to their schools, or to the professors who set the exam. Whilst student organisations have urged the abolition of the exam, the educational authorities have resisted this, although for a reason which cannot be openly admitted: in the absence of any other standardised national exam or evaluation of scholastic achievements, the university entrance exam is serving that function and acts as a balancing mechanism for the whole system.

However, the tendency to blame the exam for a student's failure to enter university is an exception to general public attitudes towards failure. Other manifestations of the problem such as low achievement, poor or no qualifications and dropping out of

school are usually perceived by the public and the teachers as the students' own fault: they are seen as unmotivated, uninterested, "absent minded" – in short, as bad students. Teachers share to a large extent a popular idea that there are two types of young people, the capable and the incapable. Incapable students are taken to be those with mental or other disabilities; the rest are regarded as capable, and differences in achievement are ascribed to personal effort, or lack of it. There is no awareness amongst teachers of the learning difficulties faced by some students. Nor is there awareness of the impact on achievement of unfavourable socio-economic conditions.

There is no concept of a "failing school", nor is it accepted that some schools do better than others in similar socio-economic circumstances. Moreover, the idea that teachers may be to blame because of incompetence, poor skills or negligence is out of the question. There is a rather widespread perception by teachers that they are submitted to serious stress by the behaviour of students, their parents and society at large. There is much talk of stress and the "burning out" of teachers.

Students see things differently, of course. Many of them, about half, consider that teachers do not help them to study or to develop as individuals. In Spain, it is not easy to distinguish between low achievement by students and excessive requirements by teachers, some of whom boast of imposing a stringent evaluation on their students, thereby – to their minds – increasing the value of the qualifications they award. This is linked to the fact that in Spain, unlike in other countries such as the United Kingdom, the concept of low achievement is not widely accepted. While related concepts such as learning difficulties may be recognised by educators and psychologists, they do not guide the practice of teachers.

## POLICY MEASURES TO COPE WITH FAILURE

Until now, the only serious and well organised alternative to the comprehensive curriculum has been special education. Over the last 15 years, special education pupils have largely been integrated into mainstream schools, where they are then assisted by specialised teachers and psychologists. The beneficial effects of such an approach have been confirmed by research. Yet, the only specific provision in Spanish education for low-achieving pupils has been grade repetition. There is no streaming, which is alien to the strong comprehen-

sive school tradition in Spain. Nor is there any general provision to help poorly-performing students, even those who are held back a year. Any support these students might get depends on the good practice of individual teachers and schools.

The expectation seems to be that the new academic structure and the new curriculum will automatically increase achievement and reduce failure. In practice, it is doubtful that this will prove sufficient, unless such changes are complemented by other measures. In the past, such measures have had a mixed impact since they have not been implemented in a systematic way. The following examples are worth mentioning:

- A decree of 1983 which created “zones of preferential educational action”. In practice, very few such “zones” were established and those which exist are not well resourced. Only 300 teachers were designated to help immigrant and ethnic minority children and 200 teachers were trained to help prevent students from dropping out of school before the end of compulsory education.
- Professional training at first level (FP-1). This was an educational opportunity opened up for those aged between 14 and 18 who did not study the baccalaureate. But FP-1 has the highest rates of drop-outs, of grade repetition and of low achievers; and therefore does not seem to have fulfilled its role of preparing students for the labour market.
- The creation of teacher resource centres in rural districts – a more purposeful measure, though with equally limited resources – which has helped to improve the skills of teachers in rural schools. Compensatory education in rural schools seems to have fulfilled its objective in some areas, but the overall impact on the school system has been limited.
- The extension of pre-school education is generally agreed to have been a considerable success. All children now attend pre-school education at the age of five, and almost all at the age of four. For most pupils the nursery school is part of the primary school they will go on to attend, which allows a smooth transition to primary education at the age of six, in a familiar environment and amongst class mates. Pre-school education undoubtedly facilitates the acquisition of skills which make it easier to learn, to read and write, which in turn have a decisive impact on students’ later academic achievement.
- A series of specific programmes to help schools, including compensatory education, the integration of pupils with special educational needs, application of new technologies in the classroom, and professional guidance for teachers. In general, these initiatives have worked well. After having been the subject of evaluative research, some of these initiatives are being progressively extended to other schools and areas.

## RECENT POLICIES AND TRENDS

The starting point for new policies on school achievement has been the law of 1990, now being implemented gradually. This law contains several elements intended to reduce failure, raise achievement and improve education. The main ones are:

- Compulsory schooling is extended to the age of sixteen, and schooling is divided into two phases, primary and secondary, with a transition at the age of twelve. Previously the end of compulsory education and the transition point to a further phase of study occurred at the age of fourteen – a difficult age for most young people. By delaying this transition to the age of sixteen, it is hoped to substantially reduce school drop-outs. Indeed, the aim is to be able to retain all young people in school (in the baccalaureate or in professional training) until the age of eighteen.
- The maximum number of students in each class has been reduced. The law of 1970 allowed up to forty students in classrooms in compulsory education, and up to fifty in baccalaureate classes. A decree issued under the law of 1990 reduces these figures to twenty five in primary schools, thirty in secondary schools and thirty five in baccalaureate classes.
- Compulsory education has been re-organised into cycles of two years. With the introduction of continuous evaluation, it is expected that students will automatically progress from one cycle to another; repetition of a year of study will become exceptional, and there will be a maximum of two permitted repetitions allowed in the course of compulsory education. Special evaluation criteria are also provided for those pupils who have difficulty progressing through the common curriculum.
- The curriculum studied between the ages of 14 and 16 is now more diverse. Students may choose among different options, and it is even possible to omit the study of some areas of the common

curriculum. Particular flexibility is allowed for students who have accumulated course repetitions and appear at risk of leaving school.

- There is also a greater variety in the structure of the baccalaureate, with different modalities including arts, humanities and social sciences, natural and health sciences, and technology. It is accepted that some of these options are more difficult than others. For instance, technology is held to be easier, and gives access mainly to the upper levels of professional training and to some short university courses. The main aim is to provide a wider and more attractive educational “menu” at a point in which many students used to drop out of school.
- Guidance departments have been set up in secondary and baccalaureate schools. Headed by a psychologist or pedagogue, they are in charge of curricular adaptations and of catering for the differing needs of students, helping those with learning difficulties, and providing educational guidance and professional orientation.
- Several initiatives have been launched to evaluate the achievement and the outputs of the educational system. A centre for evaluative research, the National Institute of Quality and Evaluation (INCE), has been set up. The INCE reports to the Ministry of Education and to the Autonomous Communities of Spain, and its responsibility extends to all aspects of education. A good example of INCE’s work was the 1995 evaluation of the new system of primary education, which covered 438 schools, and analysed student achievement, curriculum programming, classroom practice, conditions of learning and the general school environment. This study also examined the relationship between pupils’ achievement and factors both within the school and outside – in particular with a socio-cultural index, which measured family income, as well as the professional and educational background of the students’ parents.

The expectation is that the reports of INCE will help to develop a culture of evaluation, and to create an understanding of the need to test pupils’ achievement and detect difficulties in a way that holds no negative consequences for students, teachers or schools. This opens the way to the idea that there are schools which “fail” in their educational

roles. The EVA Project, launched in 1991, evaluates the structural and functional aspects of schools at all levels. Its philosophy is one of formative evaluation, not so much to verify levels of achievement, but to provide help and support, and it is carried out only in those schools willing to participate. In the past five years around 1 000 schools have been evaluated in this way. This has been the first systematic evaluation carried out in Spain taking individual schools as the unit of analysis (Luján and Puente, 1996).

To what extent will these reforms be influenced by wider political considerations? The election, in July 1996, of a more right-wing government in Spain came only a few months before the introduction of the new secondary education system. The new system had come under increased criticism immediately prior to this change, from baccalaureate teachers who feared that more students would cause a fall in attainment levels, and from small towns whose children had to travel to a secondary school in a larger town. As so often happens, there are mixed interests behind the protests. Some teachers are reluctant to move from one town to another; and some local authorities are worried about the impact of a progressive depopulation in certain regions of Spain.

The Popular Party government is likely to reopen some issues settled by the former Socialist government: for example, more support for private schools and for the teaching of the Roman Catholic religion in schools. Beyond question, ministers are impelled by educational intentions, but they also have to respond to professional and ideological interests.

In Spain, as in some other OECD countries, the first necessary step to combat failure at school is to acknowledge its existence. That barrier has only partially been surmounted. While steps are being taken to analyse the problem, for example by the work of INCE, and several policy initiatives have been launched to remedy failure, there is still little recognition of the existence of failure and little debate on the means of solving it. Without such acceptance of the problem, there remains the danger that failure will not be addressed as an issue in its own right, but will be discussed only tangentially, as a by-product of other debates.

## UNITED KINGDOM, AUSTRALIA AND NEW ZEALAND: AN INSTITUTIONAL APPROACH

This paper examines policy on combating failure at school in the four countries of the United Kingdom, and in Australia and New Zealand. It establishes an analytical framework for examining such policy, covering contextual factors, the manner in which policy is determined, its focus, the means of accountability and the nature of intervention. It then considers the practical experience of these countries, whose common feature is that their policies focus on the school as the level at which failure is best tackled and remedied.

### ANALYTICAL FRAMEWORK

The intervention strategies governments use to sustain quality and to reduce or eliminate underperformance will be strongly affected by the cultural, social and economic context within which they are implemented. The discussion below proposes an analytical framework for examining such influences on the development of policies to overcome failure. The framework will be used to examine the policy approaches in the countries dealt with here but is also intended to have general relevance.

### Contextual factors

Cultural attitudes have an important bearing on the question of educational failure in at least two ways. Firstly, failure is defined in accordance with the overall objectives a society establishes for its education system. The countries examined in this paper are concerned with raising standards of education as a means of improving their economic performance and their international competitiveness. The view they take on success and failure will inevitably be informed by this concern. However, within this broad goal there may be other objectives too. In Northern Ireland, for example, education is expected to play a part in enabling the Catholic and Protestant communities to live and work together in harmony. In Australia, education is intended to

enable the aboriginal peoples to maintain and develop their culture while becoming part of the modern, diverse Australian society. Different measures of success and failure are needed in these cases.

Secondly, historic cultural attitudes to education – the status it is given, popular beliefs about the potential of education and the extent to which “ability” is inherited, for example – make a tremendous difference to the success of schools and education systems. Among the countries of the United Kingdom, for example, there is some evidence of a much stronger belief in education in Scotland which may help to explain why, on the whole, the education service there is more successful and better funded than in the rest of the United Kingdom. England has a strong tradition of providing a high standard of academic education for a minority of students and conversely of according low status to vocational education. This, too, helps to explain aspects of the performance of its education service. Northern Ireland, unlike the rest of the United Kingdom, has maintained a selective secondary school system which has had the effect of ensuring better performance at the top end of the ability range and worse performance at the bottom end than in the rest of the United Kingdom. Of course, policies on combating school failure may in the long run help to change cultural attitudes but such attitudes can be firmly entrenched and are likely to take some time to shift.

Social factors, too, are influential in shaping both policy on failure and its likely impact. The school effectiveness research internationally demonstrates that while individual schools can and do make a substantial difference to pupil outcomes, the school effect does not account for more than – at the outside – 25 per cent of the variation. The other 75 per cent is accounted for by other factors such as prior learning, race, gender and, above all, social factors. The distribution of wealth in society and the

scope and nature of social policies on, for example, health, social security and housing, have a major impact on educational performance. In places such as the United Kingdom and in New Zealand, the growing divisions between rich and poor over the last twenty years will have an important bearing on performance and policy comparisons. Countries in which there are not such extremes of wealth and poverty will face different challenges.

A third factor which inevitably influences school performance is the level and distribution of government funding for education. The issues of school failure and success in a country such as the United States, where funding for education is distributed regressively, will be different from countries such as the United Kingdom where funding distribution is progressive. Similarly the distribution of funding between the secondary and primary sectors – which in the United Kingdom, for example, favours secondary schools – has important implications for the overall performance of the system.

### **The determination of policy**

Countries vary dramatically in the ways in which policy is determined. They vary, for example, in the level or tier of government which determines education policy; they vary too in the extent to which the issue is party political and in whether education policy is highly centralised. In England and Wales, for example, there has been, over the last decade, a shift of power away from local government towards both central government and individual schools. In New Zealand, the involvement of the local tier of government in education was brought to an end in the reforms that followed the Picot report. In Australia, by contrast, the constitution gives the Federal government a strictly limited role in education policy.

Where the power over schools' affairs is in the hands of a local or regional tier of government, clearly the influence of central government over policy on failure is much reduced. It is interesting that the most radical reforms of policy on failure have taken place in England and Wales, and in New Zealand, where central government is most influential. On the other hand, where local government is strong, as in Scotland, change in this area has been muted.

### **The focus of policy**

In some OECD countries, failure is perceived to be mainly a systemic problem; in others, a problem of individual students or groups of students. In the United Kingdom, New Zealand and to a lesser extent in Australia, the issue is seen as a school level problem. In other words, in these countries the prime responsibility for raising standards has been bestowed upon schools. Schools have been given substantial delegated responsibility and are then held accountable for their performance. When this falls below an acceptable level, the school is deemed to have failed. In countries such as Belgium and France, failure is perceived more in terms of underperforming subsections of the population with systemic solutions being sought for the problems which have been identified. The school is perceived as a small unit within a system which has prime responsibility for bringing about change. The school is not held accountable in the same way.

These very different approaches to the question of failure are issues of culture as well as policy. It is probably too early to say which is likely in the long run to be more effective in raising overall standards of educational performance.

### **The means of accountability**

Where failure is seen as a systemic issue, the question of how to hold individual schools to account does not arise. By contrast, in the countries dealt with in this paper where individual schools, to varying degrees, are given substantial autonomy, the means of holding them to account is a crucial policy issue. It is important in three ways. Firstly, there is the issue of democratic principle: public services, which depend on taxpayers' money, ought to be held to account. Secondly, there is the question of measuring the performance of the system as a whole which, in systems where the school has substantial autonomy, demands that each of them be held to account. Thirdly, there is the motivational impact on the staff of the school of being publicly held to account. The pressure that results from knowing that performance data will be published is – some argue – a powerful motivator. Others argue that it can also be demoralising.

Among these countries there are a number of different accountability systems in operation. The Scottish approach emphasises school self-evaluation with inspection of a sample of schools as a means of identifying national trends. A similar

approach has been adopted in New South Wales, Australia. The model in England and Wales, on the other hand, depends on a “harder” system of regular independent and external inspection. The New Zealand model falls some way between the two, but is nearer to that of England and Wales.

It is important to note that even in the “hardest” model – that in England and Wales – the importance of self-evaluation is explicitly recognised. The government view, in this case, is that by prescribing external inspection, schools will be pressured into undertaking self-review prior to the external inspection. There is now considerable evidence that this is happening with beneficial effects. It remains an open question whether the same or greater benefits would accrue at less expense if a model nearer to the Scottish approach were adopted.

### **The nature of intervention**

There is a close relationship between the accountability model that is adopted and the kinds of intervention that follow the identification of underperformance. The most systematic follow-up occurs in England and Wales, and in New Zealand. While in Scotland inspectors do follow up to check that their recommendations have been acted upon, there is no provision for central government to take over a failing school and either improve it or close it. This model was introduced in England and Wales in 1993 and drew on the experience of the approaches adopted in some American cities. Though the powers have only been exercised once in England, the threat of intervention acts as a pressure on local authorities to take clear consistent decisions with regard to failing schools. In general, however, in the five countries in this study, there has been far greater reluctance to intervene drastically in underperforming schools than in some parts of the United States.

One factor affecting decisions about how to intervene is perceptions in government about the quality of the system. In England and Wales, there has been considerable concern that the education system has consistently underperformed over the last generation and in particular that there is a long tail of underperforming schools. The strategy for dealing with failure is in part explained by this analysis. In Scotland, where overall performance is higher, where public support for the education service is greater and where there is not the same long tail of underperformance, a different “gentler” strat-

egy has been adopted, even though both systems are controlled by the same government.

## **NATIONAL POLICIES AND PRACTICES**

### **England and Wales**

The approach to school failure in England and Wales is based on the premise that schools are responsible for their own improvement. Schools control their budgets, including that for staffing, and have responsibility for managing their human and other resources. They are held accountable for their performance through the publication of their examination and test results, and through inspection. Inspection is organised nationally and each school is inspected once in a four year cycle. The inspection takes place against detailed criteria laid down in the “Framework for Inspection”, which is published by the Office for Standards in Education (OFSTED), the national inspection agency. OFSTED also puts out to tender the school inspection contracts and appoints the inspection teams.

Following inspection, all schools are required to draw up an Action Plan which addresses the key issues raised by the school inspectors. There are specific statutory regulations for schools which are found to be providing an unacceptably poor level of education. First of all, the judgements of the inspection team are checked by Her Majesty’s Chief Inspector of Schools. Each one is placed under “special measures”, and is required to draw up an action plan like other schools. The local education authority (LEA) must also draw up a plan setting out how it intends to support the school. The LEA can, if it chooses, withdraw the school’s delegated budget and/or appoint additional governors. It may also choose to close the school and disperse the pupils to other schools.

OFSTED monitors the progress of schools under special measures on a termly basis. The Department for Education and Employment receives OFSTED’s reports and briefs ministers on all such schools. When Her Majesty’s Chief Inspector believes that a school has improved sufficiently, it is taken off the special measures list. It is an expectation that this level of improvement should occur within two years. The minister has powers to take a school out of the hands of the local authority if he/she believes that insufficient progress is being made. In such cases, the minister appoints an Education Association of five or six people to take control of the school and to

decide whether to close it or to implement a programme of improvement.

As of the end of March 1997, some 300 schools had been placed under special measures. This represents about 2 per cent of those schools which have so far been inspected. Most of these have improved significantly. About 8 per cent have been closed. An education association has been established only once – in the case of Hackney Downs School in London – and on that occasion recommended closure of the school.

The government has also been concerned about those schools which, while not in need of special measures, are nevertheless a cause for concern. Up to 10 per cent of schools are in this category. These schools are, like others, required to draw up an action plan. They can expect a follow-up visit from OFSTED. The government has also provided additional funding to enable schools in these circumstances to buy in assistance with preparing and implementing an action plan.

The overall goal of the government's policy on school failure is to raise standards and expectations across the school system. It is determined, especially, to deal with the long tail of underperforming schools which are a feature of education in England and Wales. It recognises that its uncompromising approach is controversial but believes its emphasis on putting the educational interests of pupils first requires nothing less. The early evidence suggests that its policy is beginning to work.

Welsh education policy is administered from the Welsh Office and, in this area of policy, broadly mirrors policy in England. The inspection cycle in Wales, however, is five years, not four, and is overseen not by OFSTED but by the Office of Her Majesty's Chief Inspector (OHMCI) based in Cardiff. Partly for cultural reasons and partly because of the smaller scale of the Principality, there tends to be a closer working relationship between OHMCI and local authorities in Wales than there is between their counterparts in England.

## Scotland

Scotland's education system is entirely separate from that in England and Wales and is the responsibility of the Scottish Office in Edinburgh and the Scottish local authorities. A national framework for quality assurance and school improvement in Scotland is based on school self-evaluation, audited and supported by education authorities

and advisory teams, and externally assessed by Her Majesty's Inspectorate (HMI) which – like the rest of the Scottish system – is entirely independent of London.

A climate was established for effective quality assurance and school improvement in five phases:

- the publication by the Inspectorate of reports on effective primary and secondary schools, in 1988 and 1989;
- the development and publication by the Inspectorate – in co-operation with the Scottish Examination Board of Standard Tables – enabling schools to analyse their examination performance within the school and against the national norms, in 1991;
- the development and publication by the Inspectorate of performance and ethos indicators against which schools were to be inspected and which could be used for self-evaluation, in 1992;
- the implementation of development planning in all Scottish schools by June 1995;
- the publication of information on school performance locally and nationally.

The key to quality control in Scottish schools is inspection by HMI of Schools. Each year it inspects and publishes a report on a statistically representative sample of Scottish schools. They also inspect secondary schools which appear to perform particularly well or poorly in external examinations. Inspections are carried out against the published performance indicators. Views about a school are sought from the education authority, the parents, and the School Board. The headteacher makes a presentation of his/her estimate of the school's strengths and weaknesses. The school development plan is taken as a starting point and the inspection covers the work of eight subject departments, support for pupils, management and quality assurance.

The inspection report is published. It includes a list of positive features and points for action, which must lead to an action plan within four months. There is a follow-up inspection between 12 and 18 months later and the results of this visit are sent to parents. If the follow-up report is satisfactory, that completes the inspection process. If not, HMI will continue to visit the school until all their recommendations are dealt with. Education authority advisers are normally involved in helping a school to implement HMI recommendations. Eventual improvement has, to date, always been achieved.

## Northern Ireland

Northern Ireland has an education system which is distinct from those elsewhere in the United Kingdom. It has a selective system based on an examination taken by children at age 11. It has a high proportion of small schools and a substantial number of Catholic schools. The sectarian divide plays an important part in shaping education policy in the province.

From the late 1980s, Northern Ireland took specific measures to reduce low achievement and bring school performance more into line with that in England and Wales. The proportion of pupils leaving school with no GCSEs was reduced from 20 per cent in 1986-87, to 7 per cent in 1992-93, and of those leaving without qualifications of any kind from 17 to 5 per cent in the same period. This was achieved by a combination of increased levels of expenditure, better targeting of resources and a range of curriculum initiatives, including greater emphasis on vocational education, investment in science, technology and information technology in schools and new funding arrangements to assist schools facing particular problems.

After a successful pilot phase in clusters of schools facing particular social and educational disadvantage, the *Raising School Standards Initiative* (RSSI) was launched in 1995. This has dedicated £17 million to 100 schools, just under 10 per cent of the total, for a period of three years. The initiative requires the active co-operation and support of the Employing Authorities, the Curriculum Advisory Service, the Department of Education and its Inspectorate, school staff, parents and governors.

The aims of the RSSI are to raise expectations by improving the quality of school management and teaching and learning; raise standards of literacy, and numeracy and performance, and improve the levels of qualifications achieved. It also intends to increase parental involvement, increase participation in further education and training, strengthen links with industry, reduce truancy and indiscipline, raise pupil self-esteem and improve pastoral care.

The schools involved have been asked to produce action plans based on objective criteria and additional support will be made available on this basis. The Inspectorate is already involved in a five year cycle of school inspection in the province. But the schools involved in the RSSI have been specifically inspected to provide a "baseline judgement" on the quality of teaching and learning in English

and mathematics, and in relation to special needs, management effectiveness, relationships within the school and between the school, parents and the community, and the effectiveness of curriculum support offered to the school. The Initiative will be monitored by the Inspectorate over its three year period.

## Australia

School administration and the major responsibility for finance is devolved from the Federal Government of Australia to the six state and two territory governments. These have varying approaches to monitoring effectiveness, inspection of schools and dealing with underperformance. The federal government is responsible for identifying national priorities, promoting national coherence and consistency, and identifying and funding strategies for achieving these aims.

The main focus of national policy in Australia is not the rescue and rehabilitation of "failing" schools. This is regarded as inappropriate for the national government, which concentrates on identifying and implementing strategies which enable schools to succeed. These strategies fall under two main headings: Federal Government Funding Programmes and Quality Schooling Programmes.

Federal Government Funding Programmes include: capital grants for schools, with particular emphasis on the needs of students from disadvantaged socio-economic backgrounds; the National Programme for Equity in Schools, which aims to lift the achievement of target groups of disadvantaged students and bring them more closely into line with the norm; National Priority Programmes, which aim to improve the quality of schooling by addressing matters such as teaching quality, teacher competence, leadership and gender equity. Particular measures attempt to deal with the under-achievement of aboriginal young people.

The federal government's main thrust in combating failure at school is by means of their Quality Schooling Programmes. These have facilitated the development of common national goals for schooling across all states and territories, the collaborative development of a national curriculum framework, national initiatives on post-compulsory education and the professional development of teachers in these contexts. Sixty million dollars are to be spent over the next three years (1996-98) on the National Professional Development Programme (NPDP) for

teachers to enable them to enhance their skills. The programme is based on a partnership between subject associations, and organisations for principals, parents, education authorities and universities. In 1994, approximately one quarter of the teaching force participated in NPDP activities. An additional programme provides for the professional development of school principals.

The federal government also funds the National Schools Network, which enables schools to share their experience of school organisation and improvement strategies. Parents' groups are also funded to assist their work in raising awareness of educational issues and to support work on literacy with parents with non-English speaking backgrounds in economically disadvantaged areas. Other projects deal with violence in schools, alienation amongst students in their middle years, and gender equity.

These policies and programmes are grounded in the belief that every Australian has a right to good quality education and that it makes good social and economic sense to remove any barriers that limit people's ability to participate in education, employment and the life of the nation. Moves are being made to accumulate information at national level to judge how effectively the country is meeting its educational goals.

## **New Zealand**

The New Zealand education system has recently undergone a major reform which has placed the management of schools under the control of locally elected boards of trustees. Nationally, the Ministry of Education is responsible for policy and resources, and the Education Review Office for monitoring schools.

New Zealand has a three-pronged approach to combating school failure. It has a number of measures intended to raise school performance generally, a central monitoring system to identify problems and the Schools Support Project with a programme for overcoming difficulties in individual schools. The system works on the assumption that the first three years of life may be the most critical for a child's learning and development. The Parents as First Teachers Programme helps parents to give their young children the best possible start in a stimulating environment. Children then participate in an extensive and diverse network of pre-school services, which follow early childhood curriculum

guidelines. Some of these services are designed to take into account minority cultural needs.

At school level, a new National Qualifications Framework and School Curriculum embraces education across all levels and in the workplace to offer maximum flexibility. There is increasing provision for Maori language education and a ten point plan to close the gap in achievement between Maori students and others. Similar efforts are being made for Pacific Islands students. Extra resources have also been put into the education services for children with special needs. From 1996, New Zealand schools will be staffed on a new basis, improving pupil/teacher ratios and guaranteeing a wider range of subjects at secondary level. This will put 1 000 more teachers into the schools at a cost of \$133 million over three years. Extra funds will also be targeted on schools where a high proportion of pupils come from backgrounds of particular difficulty.

The Education Review Office is an independent, national department established in 1989 to monitor, evaluate and report publicly on the nature, quality and impact of all education services below university level. Review officers have wide powers of entry into an inspection of schools. Where a review discovers serious deficiencies in a school, a discretionary assurance audit will take place within six months. This was imposed on 10 per cent of schools in 1995-96, and half of those required further action. The Minister of Education is empowered to dissolve a school board and has done so three times over the last five years. Alternatively, the Review Office can suggest other measures the board may take to improve performance. Closure of the school is the final option the Review Office can recommend.

Schools in difficulties have access to the School Support Project (SSP) which is intended to provide a safety net for institutions "at risk". There are four major aspects to the SSP action strategy: self-improvement and informal action, formal action, statutory action and schooling improvement projects. Formal procedures include a six month's follow-up on an unsatisfactory report, with external assistance for the implementation of an action plan. If all this fails, the Ministry of Education may use statutory powers to improve a school's performance, including the appointment of a commissioner to replace the board of trustees. School improvement projects offer groups of schools with similar difficulties the chance to work together to improve performance.

## POLICY IMPLICATIONS

The comparative examination of national approaches to combating failure has important implications for education policy across the OECD countries. The first, perhaps obvious, point is that the evidence from these countries suggests strongly that, for economic and other reasons, there will be continued concern about raising standards of educational performance and therefore with finding effective means of overcoming failure. In different ways and to varying degrees, all the countries studied here are wrestling with the issue of failure at school. The approach they have taken is contingent on factors such as party political considerations, cultural and social context, and the nature of failure in the country concerned.

The second factor, which distinguishes this group of countries from some other OECD Members is that they all, again to varying degrees, see the individual school as a major focus for policy. While the government in Australia takes a broadly systemic view, the state governments have generally encouraged school autonomy as part of their reforms. As a result, measuring school performance, school inspection and deciding in what circumstances to intervene have all become major issues there, as is also the case in the United Kingdom and New Zealand. New Zealand and England and Wales have taken this approach furthest. Both have exercised the power of central government to take over individual schools which, through inspection, have been identified as failing.

Whether this approach has implications across the OECD or will remain the policy in only a minority of Member countries remains to be seen. Culturally, many OECD Members would find the approach alien. On the other hand, it is uncannily similar to the approach of large commercial organisations which tend to delegate extensive autonomy to teams at the front line, hold them accountable and, where necessary, intervene.

This raises the third important issue. If some countries, in dealing with failure, focus predominantly on the school, while others focus on the system, what emerges from the examination of these countries is that solutions to the failure problem are likely to emerge from rethinking the complex relationship between the school and the system. Ultimately, however, a school's performance is affected by a range of systemic factors, including funding, policies on choice and wider social policies, regardless of how much autonomy it has. Similarly, no

attempt to solve the problem of failure at a systemic level is likely to work unless it takes account of the day-to-day policies and approaches of individual schools and the educational experience of individual students.

The interplay between school and system needs to be examined in more detail. One aspect of some importance in this relationship is the degree of flexibility of the constitutional arrangements governing education policy. New Zealand and England and Wales have all the advantages of a highly centralised system, in terms of being able to bring about rapid legislative change; but they have to live with the disadvantages too, such as the constant temptation for politicians to make change even when it is not necessary. Federal systems, on the other hand, have less flexibility and depend more upon achieving concerted action among the different tiers of government. It is clear, either way, that the problem of failure will only be solved when the problems of the school and the system and the relationship between them are considered and acted upon together.

A fourth conclusion that stands out from this paper is that, regardless of the nature of the inspection system, the development within schools and across the education system of a climate of critical self-review is likely to be central to addressing failure. If such an approach is to succeed, it will depend on the quality of performance data the system is able to generate. It is noticeable that each of the countries studied here is investing heavily in the analysis and effective distribution of performance data.

Finally, the development of policy for addressing school failure raises an important question about the motivation of the education workforce, especially of teachers. Failure will, to some degree, be on the agenda of all education systems for the foreseeable future. The taboo that existed in some countries in the past, which prevented serious analytical discussion of failure, has been broken. However, governments are discovering that, if the public debate about education – particularly in the media – is dominated by the question of failure, there is a danger of demoralising teachers. While some critics of government policy in the United Kingdom would recommend closing down the debate about failure, the government's more sophisticated strategy, which is likely to be more productive in the long run, is to seek means of promoting and celebrating success while simultane-

ously recognising and attempting to deal with failure where it occurs.

How to achieve this balancing act will nevertheless remain a challenge to governments and to teachers themselves in each of the countries examined here. One of the central lessons of this study of policies for combating failure is that such

policies are bound to test the quality and robustness of the relationships in a society between government, teachers and parents. Those countries where these relationships are firmly founded and capable of withstanding critical analysis are more likely to be able to solve successfully the problems of educational failure.

## NOTES

1. For a discussion on the development of measures related to different aspects of school performance, see Foster *et al.* (1996).
2. The 1990-1991 Study of Reading Literacy of 14 year-olds (applied in 32 countries, 19 of which are OECD Members) and the 1994-1995 Third International Mathematics and Science Study (TIMSS) of 13 year-olds (applied in 45 countries, 23 of which are from the OECD area).
3. IALS was co-ordinated by Statistics Canada in partnership with OECD, the National Centre for Education Statistics, US Department of Education, and the Education Testing Service. A test battery and a background questionnaire were administered by home interviews to representative samples of approximately 3 000 adults – aged 16 to 65 – in each participating country. The results for the first group of countries to participate in the survey (Sweden, Germany, the Netherlands, Switzerland, French and German cantons, Poland, the United States and Canada) were released in the 1995 report *Literacy, Economy and Society*. Comparable data for a second group (the Flemish community of Belgium, Australia, New Zealand, Ireland and the United Kingdom) were published in the 1997 report *Literacy Skills for the Knowledge Society*.
4. The OECD Project on INES benefits from collaboration of UNESCO and Eurostat. The comparability of these data is enhanced by the co-operation of the Member countries to gather information, and develop common definitions and criteria for their verification and interpretation.
5. This “inter-quartile range” is the difference between the 25th percentile and the 75th percentile, a measure commonly used to study such a range of performance.
6. In relation to the average achievement within that country (as opposed to the international mean of OECD countries included in the IEA Reading Literacy and TIMSS studies).
7. The only exception is Australia, where the handicap of over-aged students in mathematics and science is close to zero.
8. From the 1994 International Adult Literacy Study (IALS).
9. Figure 6 presents such data for the school year 1994-1995 in 22 OECD countries.
10. IALS measures what adults can actually do when faced with certain types of reading activities. While three measures of literacy are used: prose, document (tables, schedules, charts, maps, forms, etc.) and quantitative scales, only document scales have been included here. The results for the three tested literacy dimensions were all scaled on a zero to five hundred range. Within this range, five empirically determined levels of proficiency were established. The five levels, while successive, are not normative. But when looking at people with low education attainment levels, the IALS data shows that many of them perform at skill levels 1 and 2.
11. OECD (1997b) reports data on the ending age for compulsory schooling for 28 OECD countries.
12. OECD’s work on the “Effectiveness of Schooling and of Educational Resource Management” identifies those conditions in relatively autonomous schools, which seem to be associated with greater effectiveness.
13. The level of retardation since 1983 has actually fallen between the fifth and sixth grades because in that year a law was promulgated, limiting grade repetition in primary education and creating a “reception” class at the beginning of secondary school for pupils who could not successfully reach the end of their primary education.
14. Only in 1989 was responsibility for education officially transferred to the level of the linguistic community (although trends in this direction were obvious beforehand).
15. Except for students who have been absent for a particularly long time and even then, ministerial permission will be required for repetition.
16. Upper secondary schools operate a combination of a grade system (1st, 2nd, 3rd year, and in some case, 4th year) and a credit system; but in practice, the grade system is more important.
17. Previously the choice of subjects was determined by each school because of the limited number of subjects and teachers.
18. This was a consequence of the context of the Cold War.
19. *Formación profesional* (FP) is a vocational stream with two options: FP-1 and FP-2. 14-year old students who finish compulsory education, but do not get a diploma, can continue their studies in FP-1 (2 year course) and FP-2 (1 year course). Alternatively, upper secondary students change to a vocational stream (FP-2) after their first year.

## BIBLIOGRAPHY

**Part One: Patterns and Policy Responses**

- CARNOY, M. (1995), "Structural Adjustment and the Changing Face of Education", *International Labour Review* 1995/96, Vol. 134, No. 6.
- EURYDICE (1994), *Measures to Combat Failure at School: A Challenge for the Construction of Europe*, European Commission, Brussels.
- FOSTER, P., GOMM, R. and HAMMERSLEY, M. (1996), *Constructing Educational Inequality: An Assessment of Research of School Processes*, Falmer Press, London.
- GRAY, J. and WILCOX, B. (1995), *Good School, Bad School: Evaluating Performance and Encouraging Improvement*, Open University, Philadelphia.
- HANNAN, D., HÖVELS, B., VAN DER BERG, S. and WHITE, M. (1995), "Early Leavers from Education and Training in Ireland, the Netherlands and the United Kingdom", *European Journal of Education*, Vol. 30, No. 3.
- HILL, P. W. (1995), *School Effectiveness and Improvement: Present Realities and Future Possibilities*, Inaugural Professional Lectures, University of Melbourne, Australia.
- OECD (1985), *Education in Modern Society*, Paris.
- OECD (1989), *Schools and Quality: An International Report*, Paris.
- OECD (1993a), *School: A Matter of Choice*, Paris.
- OECD (1993b), *Education at a Glance – OECD Indicators*, Paris.
- OECD (1994a), *The OECD Jobs Study*, Paris.
- OECD (1994b), *Quality in Teaching*, Paris.
- OECD (1994c), *The Curriculum Redefined: Schooling for the 21st Century*, Paris.
- OECD (1995a), *Integrating Students with Special Needs into Mainstream Schools*, Paris.
- OECD (1995b), *Our Children at Risk*, Paris.
- OECD (1995c), *Schools under Scrutiny*, Paris.
- OECD (1995d), *Education at a Glance – OECD Indicators*, Paris.
- OECD (1996a), *Lifelong Learning for All*, Paris.
- OECD (1996b), *Changing the Subject – Innovations in Science, Mathematics and Technology Education*, Routledge, London.
- OECD (1996c), *Successful Services for our Children and Families at Risk*, Paris.

- OECD (1996d), *Mapping the Future: Young People and Career Guidance*, Paris.
- OECD (1996e), *Integrating Services for Children at Risk*, Paris.
- OECD (1997a), *Education Policy Analysis 1997*, Paris.
- OECD (1997b), *Education at a Glance 1997 -- OECD Indicators*, Paris.
- OECD (1997c), *Parents and Partners in Schooling*, Paris.
- OECD and STATISTICS CANADA (1995), *Literacy, Economy and Society: Results of the First International Adult Literacy Survey*, Paris and Ottawa.
- OECD, STATISTICS CANADA and HUMAN RESOURCES DEVELOPMENT CANADA (1997), *Literacy Skills for the Knowledge Society -- Further Results from the International Adult Literacy Survey*, Paris.
- O'KEEFE, D. J. (1994), *Truancy in English Secondary Schools*, HMSO, London.
- REYNOLDS, D. and CUTTANCE, P. (1992), *School Effectiveness: Research, Policy and Practice*, Cassell, London.
- RIBBINS, P. and BURRIDGE, E. (1994), *Improving Education: Promoting Quality in Schools*, Cassell, London.

**Part Two: Country Case Studies****Belgium**

- GRISAY, A. (1988), *Du mythe de la "bonne" école à la réalité (fuyante) de l'école "efficace"*, Service de Pédagogie expérimentale de l'Université, Liège.
- STEGEN, P. and VLASSIS, J. (1994), *La prolongation de la scolarité obligatoire. Dix ans après*, Report prepared for the Ministry of Education for the French community of Belgium, Service de Pédagogie expérimentale de l'Université, Liège.

**Canada:**

- de BROUCKER, P. (1996), "School Failure in Canada: Magnitude, characteristics, and policy issues. Paper prepared for the European Symposium on School Failure", Athens, Greece.
- CANADIAN INSTITUTE FOR ADVANCED RESEARCH (CIAR) (1992), *The Learning Society*, Toronto, Ontario.
- CO-OPERATIVE EVALUATION AND DEVELOPMENT OF THE SCHOOL SYSTEM (CEDSS) (1981-82), *The Durham Board of Education: Internal Evaluation Report*, Ontario Ministry of Education, Toronto, Ontario.

- EPSTEIN, J. (1995), "School/Family/Community Partnerships", *Phi Delta Kappan*, Vol. 76, pp. 710-712.
- FULLAN, M. (1996), "Report of Country Expert Commission – Canada/United States of America to the Bertelsman Foundation", Faculty of Education, University of Toronto, Toronto, Ontario.
- LEITHWOOD, K., JANTZI, D. and STEINBACK, R. (1995), "An Organizational Learning Perspective on School Responses to Central Policy Initiatives", Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- NEWMANN, F. M. and WEHLAGE, G.G. (1995), *Successful School Restructuring*, Center on Organization and Restructuring of Schools, University of Wisconsin-Madison, School of Education, Madison, WI.
- OFFORD, D., BOYLE, M. and RACINE, Y. (1991), "Children at Risk: Schools reaching out", *Education Today*, March/April, pp. 17-18.
- ONTARIO ROYAL COMMISSION ON LEARNING (1995), *For the Love of Learning: A report of the Royal Commission on Learning. A short version*, Queen's Printer, Toronto.
- STATISTICS CANADA (1993), *Leaving School – Results from a national survey comparing school leavers and high school graduates 18 to 20 years of age*, Government of Canada, Ottawa.
- Japan:**
- CENTRAL COUNCIL ON EDUCATION (1991), *Report on Educational Reform Responding to the New Era*, Tokyo.
- MONBUSHO (1992), *Upper Secondary School Drop-outs*, Tokyo.
- MONBUSHO (1996), *Japanese Government Policies in Education, Science and Culture 1995 – White Paper on Education Policy*, The Printing Bureau, Ministry of Finance, Tokyo.
- NATIONAL COUNCIL ON EDUCATIONAL REFORM (1985), *The First Report on Educational Reform*, Tokyo.
- U.S. DEPARTMENT OF EDUCATION (1987), *Japanese Education Today*, U.S. Government Printing Office, Washington, D.C.
- YAMAMOTO, S. (1997), "The Role of Japanese Higher Education System in Relation with Industry", in Akira Goto (ed.), *Innovation in Japan*, Oxford University Press, Oxford.
- Spain:**
- CARABAÑA, J. (1987), "Origen social, inteligencia y rendimiento académico al final de la EGB", in C. Lerena (ed.), *Educación y Sociología en España*, Akal, Madrid.
- CASAS, P. et al. (1996), *El fracaso escolar en la zona sur de Madrid*, Euroliceo, Madrid.
- CONSEJO ESCOLAR DEL ESTADO (1995), *Informe sobre el estado y situación del sistema educativo: curso 1993/94*, Ministerio de Educación, Madrid.
- GARCÍA-LÓPEZ, J. (1994), *El rendimiento escolar*, Editorial Popular, Madrid.
- GIMENO, J. (1976), *Autoconcepto, sociabilidad y rendimiento escolar*, Instituto Nacional de Ciencias de la Educación, Madrid.
- JIMÉNEZ, C. (1988), "Condición socioeconómica de la familia y rendimientos escolares de los hijos al término de la EGB", *Revista de educación*, Vol. 287, pp. 55-70.
- LUJÁN, J. and PUENTE, J. (1996), *Evaluación de centros docentes: El Plan EVA*, Ministerio de Educación, Madrid.
- PERRENOUD, Ph. (1990), *La construcción del éxito y del fracaso escolar*, Morata, Madrid.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16  
PRINTED IN FRANCE  
(91 98 04 1 P) ISBN 92-64-16151-1 – No. 50365 1996