# Signs of the times

*Monitoring the position of Dutch education: the O 8 project*

*Stage two: digging deeper*

## Secondary education

Hans Luyten

# 4 Secondary Education

## *4.1 Introduction*

The main focus of this report is on education expenditure and participation. The indicator most frequently referred to in public debates on expenditure is the percentage of GDP per country on education. A serious problem with this indicator is that it is affected by enrolment rates and the size of the youth population. A more sophisticated indicator is the cost per student. To be valid this indicator requires not only an accurate assessment of educational expenditure but also of the numbers of students participating. The next section focuses on specific problems with regard to data collection on costs in secondary education, especially from a Dutch perspective. The section deals with possible explanations that may be derived from available international (OECD) statistics to explain the relatively low expenditure on education in the Netherlands. The third section is on participation.

## *4.2 Expenditure on secondary education as a percentage of GDP*

This section focuses on potential shortcomings in the international statistical data with regard to educational costs at the lower and general upper secondary level. The main difficulties for the Netherlands with regard to the statistical information in the UOE (UNESCO, OECD & EU) data collection have been identified. Below it is reported in how far these potential shortcomings may influence the position of the Netherlands in international statistical reports as compared to Germany, Sweden and the United Kingdom. The discussion is based on the UOE data provided by the Netherlands, Sweden, Germany and the United Kingdom and relates to data for 1995.

With respect to expenditure on education the indicator most frequently referred to in public debates is the percentage of GDP per country spent on education. The table below shows the figures for primary and secondary education. The figures are quite stable over the 1993-1995 period with a slight decrease for Germany. The most remarkable thing, however, is the lack of comparable data for such a seemingly basic indicator.

Table 4.1: Expenditure on primary and secondary education as a percentage of GDP(expenditure from both public and private sources on educational institutions plus public subsidies to households)

| | ***1993*** | ***1994*** | ***1995*** |
|---|---|---|---|
| NL | 3.4% | 3.4% | 3.4% |
| D | 4.1% | 3.9% | 3.9% |
| S | 5.1% | 5.1% | 5.1% |
| FL | --- | --- | --- |
| UK | --- | --- | --- |

Source: Education at a Glance 96 (p.60), 97 (p. 63), 98 (p. 82)

### 4.2.1 Coverage

The next sections deal with specific problems regarding data collection on cost in secondary education.

***Private payments***

In the Netherlands part of these payments (the payments by households) are estimated on the basis of a survey conducted in 1991. Private payments to educational institutions excluding public subsidies to households and other private entities make up 4.6% of the total public and private expenditure on lower and upper secondary education in the Netherlands. The figures relating to payments by households have been corrected for inflation. Whether this is an underestimation or an overestimation of the true expenditure is unclear. It is unclear how far data from the other countries are accurate. In Sweden and the UK these costs account for less than 1% of the total costs. In the case of Germany the contribution of the private sector to the funding of public and private education is known. But it cannot be determined which funds come from households and which come from other private entities. The private contributions account for approximately 25% of the total expenditure on secondary education in Germany. In Sweden and the Netherlands payments by firms and non-profit organisations make up less than 1% of the expenditure on secondary education. Data for the UK and Flanders are not available.

***Transfers and payments to private entities***

Costs for student transportation (and other provisions) in the Netherlands are based on financial reports by the local governments, but not all local government reports specify these costs. As a result, the costs are somewhat underestimated. In the Netherlands these costs account for 0.7% of the total government expenditure on education across all levels. However, the report "Education and Training Statistics for the United Kingdom 1998" (DFEE) shows that in 1996-1997 the cost on student transportation accounted for 2.2% of the total government expenditure on education. Expenditure on meals and milk accounted for an additional 0.6%. Although the UK statistics indicate that costs on transportation and meals account for no more than a modest proportion of the total expenditure, they do imply that these costs may be underestimated in the Netherlands. In Flanders, Sweden, Germany and the UK accurate estimates of the government contribution to student transportation costs are included in the expenditures by local or regional governments.

***Funds from international agencies and other foreign sources***

For the Netherlands, there is no information on funds from international agencies and other foreign sources, but they are believed to be of minor importance. This lack of information may lead to an underestimation of the educational costs in the Netherlands. On the other hand, none of the other four countries in this report takes international funds into account when the costs for lower and upper secondary education are calculated.

***Expenditures not allocated***

In the Netherlands, Sweden, and the UK overhead costs such as costs for the inspectorate and ministry are allocated to ISCED levels on the basis of the number of students. In Germany and Flanders, some of the overhead costs are grouped under the heading "not allocated by level". The amount is about 4.6% of the total expenditure.

***Private institutions***

In the Netherlands no information is available with regard to expenses on private institutions that are not funded by the government. For the Netherlands this probably leads to a minor underestimation of the educational expenses, as the independent private institutions cover less

than 1% of the students in Dutch lower and general upper secondary education. It does, however, lead to a substantial underestimation of the educational expenses in the United Kingdom, where 8% of the students in lower and general upper secondary education are in independent private institutions and data on the financing of the independent private institutions are not available. Although the payments to independent private institutions in the Netherlands are not known, the number of students is known. Participation is therefore not underestimated because of a lack of information with regard to independent private education. The same goes for the UK. Since financial information on the private sector is not available, the students in the private institutions are not taken into account when the costs per student are calculated. In the statistical information on Germany no distinction is made between independent and government-dependent private education. Participation and finance on private education are grouped into a single category. In Sweden there is no independent private lower secondary education, while the size of the independent private sector at the upper secondary level is negligible. In Flanders both the numbers of students in and the cost for private secondary education are unknown. Cost and numbers of students are probably negligibly small in Flanders.
If financial information on the private sector is not available in any of the countries, the students in the private institutions are not taken into account when the costs per student are calculated.

Table 4.2: Summary of the findings with respect to coverage

| | |
|---|---|
| Funds from international agencies and other foreign sources | Not taken into account for the Netherlands.<br>The same goes for Germany, Sweden, Flanders and the UK |
| Expenditure not allocated | In general, overhead costs such as costs for the inspectorate and ministry are allocated to ISCED levels on the basis of the number of students. |
| Expenditure on independent private institutions | Not taken into account for Netherlands, Flanders, Sweden and the UK Private independent education accounts for less than 1% in the Netherlands, Flanders and Sweden but for 8% in the UK<br>In Germany, no distinction is made between dependent and independent private institutions. |
| Payments by households to educational institutions | Reported costs in the Netherlands make up 4.6% of the total costs but are based on a 1991 survey. In Sweden and the UK the costs reported account for less than 1% of the total costs.<br>In Germany these costs are grouped into a single category with payments by firms and non-profit organisations which make up approximately 25% of the total costs. |
| Transfers and payments to private entities | Underestimated transportation costs in the Netherlands.<br>Reported transportation costs account for 0.7% of total Dutch expenditure, while they account for 2.2% in the UK |
| Students in independent private institutions | Numbers of students known in the Netherlands and UK<br>Germany applies a single category for independent and government-dependent education.<br>Negligible numbers in Sweden. |

The general conclusion is that although in some respects expenditure may be underestimated in the Netherlands, it does not seem likely that this causes a less “flattering” position of the Netherlands in international comparisons.

### 4.2.2 Structural differences

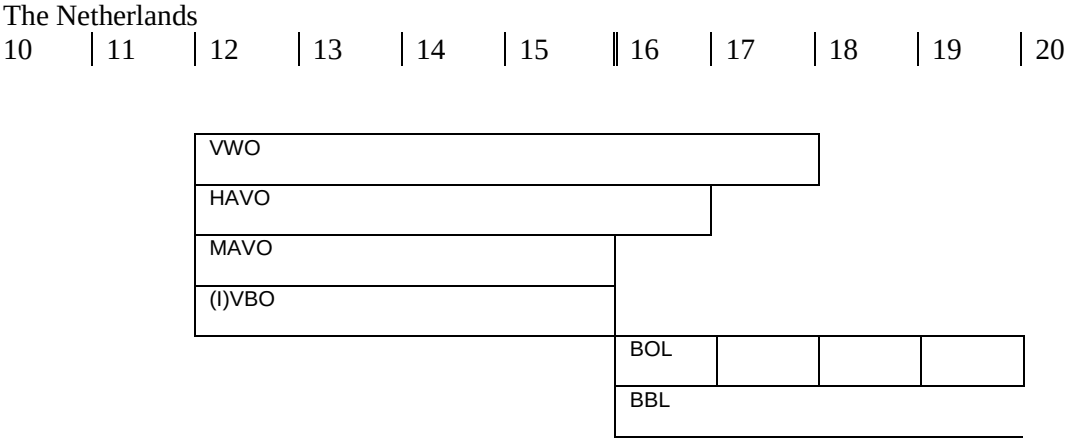
***Differences in length of programmes***

The national systems for secondary education differ widely across countries. This is evident even if only five educational systems are taken into account. Of the five countries in question the systems in Sweden and the UK are most simply structured. Until 16 years of age Swedish pupils attend the "Grundskola" which includes both primary and lower secondary education. The last three years of the Grundskola count as lower secondary education. Full-time schooling is compulsory until the age of 16. Upper secondary education is provided by the "Gymnasieskola" where pupils may take vocational programmes (program med yrkesämmen) or general programmes (övriga program). For the UK the description only relates to England and Wales. The systems in Northern Ireland and Scotland are somewhat different. Secondary education starts at age 11 and lasts until the age of 16. The border between lower and upper secondary lies at age 14. After finishing "key stage 4" students can either continue in general or vocational upper secondary education.

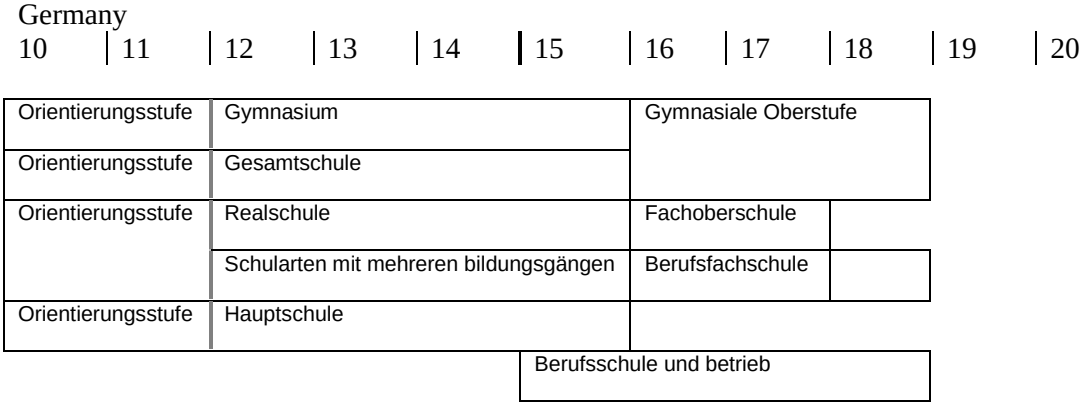
The German system looks considerably more complex, although this is partly due to regional differences. For example, full-time education is compulsory for nine years in most "Länder" but in four "Länder" compulsory full-time education comprises ten years. Lower secondary education starts relatively early, namely at the age of 10, with a 2-year orientation stage ("Orientierungsstufe"). Pupils are selected into one out of five educational tracks based on their (perceived) cognitive aptitudes. Two of these tracks ("Gymasium" and "Gesamtschule") prepare for general upper secondary education ("Gymnasiale Oberstufe"), whereas the other three generally prepare for further vocational education and training of various levels. The typical duration of general secondary education is three years. The duration of the vocational programmes varies.

In Flanders lower secondary education starts at age 12 and lasts until 14. After that students must choose between general upper secondary education ("ASO") and one of the vocationally oriented programmes. In lower secondary education there is already some selection between pupils with learning problems (in "leerjaar B") and the others (in "leerjaar A"). The general upper secondary program prepares for university. Many students, especially in the vocational programmes take an extra year, which is generally considered as secondary education in Belgium but which is not secondary education according to the international classification (ISCED).

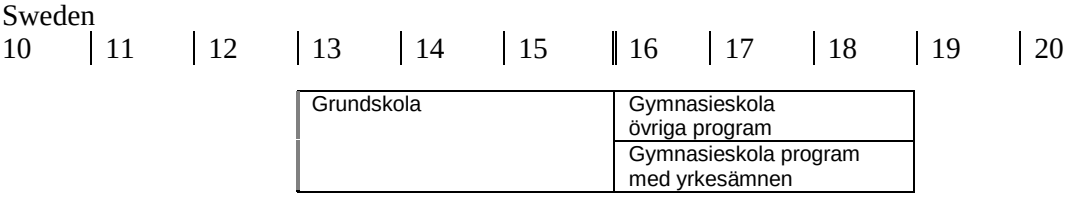
The Netherlands



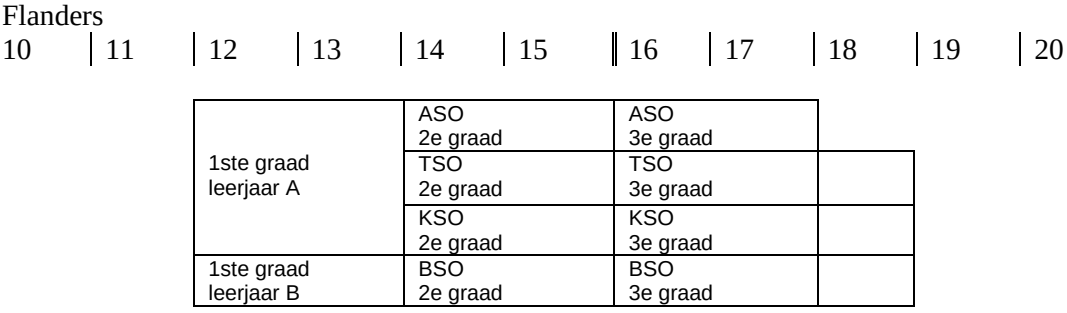

Germany



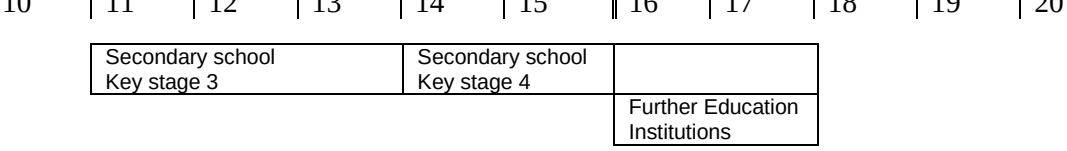

Sweden




Flanders




England and Wales




In the Netherlands secondary education starts at age 12. Just as in Germany pupils are selected into different tracks on the basis of their (perceived) cognitive ability. The pupils who were most successful in primary education are selected for the pre-university track ("VWO") and the pupils that had more difficulties are selected for the pre-vocational track

("VBO") or even the individualised pre-vocational track ("IVBO"). In all four tracks the students follow a common core curriculum ("basisvorming"), but in the more advanced tracks it is taught at a faster pace and/or extra topics are added. The least advanced tracks ("MAVO" and "(I)VBO") provide a 4-year course. The pre-university track ("VWO") takes (at least) 6 years and the HAVO track offers a 5-year program. In the Dutch system the transition from lower to upper general secondary education is hardly visible. The last two years of the VWO and HAVO track are considered to be general upper secondary education. The first years of these tracks are considered to be lower secondary. All four years of both the (I)VBO and MAVO track count as lower secondary education. The duration of upper secondary vocational varies and it may start at age 16 (or later).

***Expenditure per student***

Besides some of the more practical difficulties discussed previously, an additional problem with expenditure on education as a percentage of GDP is that this indicator partly reflects participation rates and the size of the youth population in a country. The size of these effects is discussed in the next section.

Expenditure per student is a more sophisticated indicator with regard to the cost of education than the expenditure per GDP, as it takes into account the effect of youth population size and the participation rates. The table below shows the expenditure per student in secondary education. The Dutch score on this indicator is a little higher than the UK score, but considerably lower than the scores for Germany, Sweden and Belgium. On the other hand, the Netherlands is the only country showing a rise in expenditure per student over the 1990-1995 period.

Table 4.3: Expenditure per student (US dollars converted using PPPs)

| | ***1990*** | ***1995*** |
|---|---|---|
| NL | 4064 | 4351 |
| D | 6866 | 6543 |
| S | --- | 5643 |
| B | --- | 5770 |
| UK | 4456 | 4246 |

Data for 1990 are expressed in 1995 prices
Data for Germany relate to (the territory of) former West-Germany
Source: Education at a Glance 98 (p. 118-199)

***Teacher salaries, workload, instruction time and number of students per teacher***

In all countries the compensation of staff (mainly teachers) accounts for the largest part of the current expenditure on, but in Sweden the compensation of staff as a percentage of current expenditure is relatively low. The strong differences between 1994 and 1995 for Germany and Sweden may be due to definition changes.

Table 4.4: Compensation of staff as a percentage of current expenditure in primary and secondary education

| | ***1992*** | ***1993*** | ***1994*** | ***1995*** |
|---|---|---|---|---|
| NL | 81% | 81% | 79% | 78% |
| D | --- | 87% | 88% | 76% |
| S | --- | 63% | 63% | 56% |
| B | 83% | 84% | 84% | --- |
| FL | --- | --- | --- | 86% |
| UK | 76% | 73% | 71% | 70% |

Source: Education at a Glance 95 (p. 103), 96 (p. 80), 97 (p. 109), 98 (p. 129)

In "Education Policy Analysis 1997" (OECD) three factors are identified that affect the salary costs per student: teacher pay, teacher workload and teaching time per student. The next table shows the impact of each factor on the costs per student. The effects displayed express to what extent the cost per student would change if everything else remained the same. The figures are therefore somewhat hypothetical in character. Besides the effect of teacher pay is based on what teachers earn after 15 years experience. The age distribution of teachers and their experience will not be identical in each and every country. Such differences are not taken into account in the assessment of the effects. Note also that the figures relate to teacher salary costs per student. This is why the costs per student in Sweden are relatively low, whereas the Swedish expenditure on education is relatively high in most other respects.
Taking these caveats into account the following can be concluded. In the Netherlands the relatively high level of teacher salaries increases the costs per student to a considerable extent, but the high workload of Dutch teachers more than compensates for this. The relatively high total instruction time for students further reduces the costs per student in the Netherlands. In Belgium the salary costs per students are high, although teacher salaries are below those of the Netherlands. Students in Belgium spend long hours in small classes, even though each teacher has a relatively low workload. Especially the reported pupil teacher ratio in Belgium is very low. This is partly due to the fact that the Flemish pupil teacher ratio actually reflects the number of teachers per pupil that are paid for. Flemish teachers on sick leave are counted but also their substitutes. Teacher salaries in Germany are relatively high, but large classes produce medium costs per student. In Sweden salaries are relatively low. Teaching hours are short, but this is offset by a class size above average.

Table 4.5: Effects on teacher salary costs per student at the lower secondary level (US Dollars, converted using purchasing power parities)

| | ***NL*** | ***D*** | ***S*** | ***FL*** | ***UK*** |
|---|---|---|---|---|---|
| Country average statutory salary cost per student | 2091 | 2342 | 1658 | 3832 | - |
| Level of statutory salary (after 15 years of experience) | +482 | +624 | -562 | +158 | - |
| Instruction supplied per teacher (hours) | -677 | +28 | +333 | +4 | - |
| Total teaching time per student (hours) | -103 | -741 | -430 | +1500 | - |
| Residual | +205 | +247 | +75 | -13 | - |

Source: Education Policy Analysis OECD 1997, p. 23

The tables below show the developments in teacher salaries, teaching hours and instruction hours in the Netherlands, Germany, Flanders, Sweden and the UK. With respect to lower secondary education teacher salaries in the Netherlands in lower secondary are more or less average, but in upper secondary general they are the highest of all five countries. In the Netherlands teacher salaries have decreased over the 1990-1996 period relative to the per

capita GDP. In the UK teacher salaries increased over the same period. In Sweden there was neither a relative increase nor decrease, but in Flanders teacher salaries decreased as well.

Table 4.6: Teacher salaries after 15 years, Ratio per capita GDP

| | ***Lower secondary*** | | ***Upper secondary general*** | |
|---|---|---|---|---|
| | ***1990*** | ***1996*** | ***1990*** | ***1996*** |
| NL | 1.6 | 1.5 | 2.2 | 2.1 |
| D | -- | 1.8 | -- | 1.9 |
| S | 1.2 | 1.2 | 1.2 | 1.2 |
| Fl | -- | 1.3 | -- | 1.7 |
| UK | 1.5 | 1.6 | 1.5 | 1.6 |

Source: Education at a Glance 98 (p. 275)

With respect to the workload of teachers, three main aspects play a key role. The ratio of student to teachers, teaching hours and instruction time. The next three tables display the changes for these three aspects in the nineties.

Table 4.7: Teaching hours per year in public institutions

| | ***Lower secondary*** | | ***Upper secondary general*** | |
|---|---|---|---|---|
| | ***1996*** | ***Change 1990-1996 (1990 = 100)*** | ***1996*** | ***Change 1990-1996 (1990 = 100)*** |
| NL | 910 | 100 | 910 | 100 |
| D | 715 | 100 | 671 | 103 |
| S | 576 | 96 | 528 | 100 |
| FL | 741 | --- | 657 | --- |
| UK | 740 | 100 | --- | --- |

Source: Education at a Glance 98 (p. 284)

The number of teaching hours per year in the Netherlands is considerably higher than in the other four countries. This number has not changed for the Netherlands over the 1990-1996 period. In Germany the workload of the teachers in upper secondary education has increased slightly between 1990 and 1996. For Swedish teachers in lower secondary education it has decreased somewhat over the same period. With respect to intended instruction time and student teacher ratios, the information on changes over time is scarce. The intended instruction for 14-year-olds is virtually the same in Belgium and the Netherlands. In the other three countries it is considerably lower. The number of students per teacher in the Netherlands is considerably higher than in the other four countries. The Flemish pupil teacher ratio is not completely comparable to that of other countries.

Table 4.8: Intended Instruction time for 14-year olds in hours per year

| | ***1994*** | ***1996*** |
|---|---|---|
| NL | 1067 | 1067 |
| D | 960 | 921 |
| S | 828 | 741 |
| FL | --- | 1069 |
| UK | | 945 |

Source: Education at a Glance 96 (p. 140), 98 (p. 289)

Table 4.9: Number of students per teacher in lower and upper secondary education

| | ***1995*** | ***1996*** |
|---|---|---|
| NL | -- | 18.6 |
| D | 14.9 | 15.0 |
| S | 13.5 | 13.7 |
| FL | 8.5 | |
| UK | 15.9 | 15.6 |

Source: Education at a Glance 96 (p. 140), 98 (p. 289)

Table 4.10: Summary of the findings with respect to structural differences

| | |
|---|---|
| Teacher salaries | The Netherlands takes in a middle position with regard to teacher salaries in lower secondary education and a top position for general upper secondary education. Dutch teacher salaries have decreased as compared to per capita GDP over the 1990-1996 period. In Sweden teacher salaries remained stable as compared to per capita GDP and in the UK they increased slightly. |
| Student-teacher ratios and teaching hours | The students-teacher ratio in the Netherlands exceeds the ratios in the other four countries. Dutch teachers make more teaching hours than their colleagues in the other countries. |

The main explanation for the relatively low expenditure on education in the Netherlands is the high workload of teachers (long hours and high student-teacher ratios). The available data do not show any sign of improvement in this respect in the nineties.

### 4.2.3 Policy

A rather popular interpretation for the low expenditure on secondary education in the Netherlands is that is results from the efficiency of the Dutch educational system. Proponents of this view like to point to the good results of Dutch students on international mathematics and science tests and similar results with regard to adult literacy. They tend to forget that in other respects the performance of the Dutch educational system is less flattering. The reading literacy of Dutch students in both primary and secondary education is below the international average. The pass rates in upper secondary education are below OECD average as well. It should be noted, though, that this last measure is rather crude from an educational perspective. There are many factors that may affect pass rates. Examples are redefinitions of upper secondary education (new ISCED levels), system reforms and changing examination standards.

The alternative interpretation is that secondary education in the Netherlands is profiting from past investments. In this view it is emphasised that Dutch expenditure on secondary education has decreased over the past decade(s). Empirical support for this assertion requires reliable data on educational expenditure over a long period. The investigations in some detail of the data on which (financial) indicators in OECD reports are based for the O-8 project show that the reliability of financial indicators is, in some respects, far from perfect especially when comparability across years is at stake. In any case, it is particularly difficult if not impossible to obtain time series on expenditure as a percentage of GDP for specific levels of education. Still there is some (weak) support for the idea of a delayed effect of educational expenditure on performance[2]. It should be noted, though, that this evidence is based on pass rates in upper secondary education. Even for a crude measure like this the available time series do no go further back than the late eighties.

[2] J.S.M. Groot (1998), Economische groei komt door goed onderwijs, ESB 20-2-1998

In summary, the empirical support for the hypothesis that Dutch expenditure on education is low because of high efficiency is not very convincing. The educational performance of the Netherlands is above average in some respects but below average in other respects. Empirical data that may confirm or reject the hypothesis that the educational performance is mainly the result of high investment in the past are hardly available at present. In any case, both the efficiency and the delayed effect hypothesis need to be refined in order to explain diverging scores on different output measures.

## *4.3 Participation in secondary education*

This section focuses on potential shortcomings in the international statistical data with regard to educational participation at the lower and general upper secondary level.

The tables below show the enrolment rates in secondary education for the population aged 15-19 and the (expected) size of this age group. The table shows that in all five countries a large majority of the population aged 15-19 is enrolled in secondary education, even though the difference between the country with highest and lowest enrolment is considerable in 96/97. The Netherlands taken in a middle position on this indicator.

Table 4.11: Net enrolment rates at age 15-19 in secondary education (based on head counts)

| | ***96/97*** |
|---|---|
| NL | 88.5% |
| D | 87.9% |
| S | 83.3% |
| FL | 92.1% |
| UK | 72.1% |

Source: Education at a Glance 98 (p. 160)

Table 4.12: Number of people at the age of lower and upper secondary education

| | ***Percentage of the population (1996)*** | ***Change (1996 = 100)*** | |
|---|---|---|---|
| | | ***1990*** | ***2006*** |
| NL | 6% | 119 | 108 |
| D | 5% | 98 | 106 |
| S | 6% | 113 | 117 |
| FL | 6% | 104 | 100 |
| UK | 6% | 107 | 108 |

Source: Education at a Glance 98 (p. 61)

### 4.3.1 Coverage

***Part-time students***

If Dutch students follow part-time education at ISCED level 2 and 3 (mostly adults) they are included in the enrolment numbers for ISCED 2 and 3. If FTEs are required, each part-time student is counted as 0.5 FTE. This is of course no more than a rough estimation, possibly an overestimation for the Netherlands. In Sweden the number of full-time equivalents is based on the numbers of hours attended by a part-time student. In Flanders part-time students are counted as 0.5 FTE. Germany and the UK report no part-time students in lower and general upper secondary education.

Another problem with regard to adults following part-time education at ISCED 2 is that the courses are provided by "Regional Training Centers" which primarily provide upper secondary vocational education (ISCED 3). When student/teachers ratios are computed the teachers employed by the Regional Training Centers should partly be counted as lower secondary education teachers, but reliable data to do this are not available. Separate student/teacher ratios at ISCED 2 and 3 are therefore not provided. A similar problem exists in the UK, in that there are adults taught in further education colleges, which primarily provide ISCED 3 vocational education, on courses which are more appropriate to ICSED 2 level. All students and teachers in further education colleges, however, are reported at ISCED 3 vocational level. As a result, the volume of vocational upper secondary in the UK is slightly over-estimated and lower secondary education under-estimated. However, the student/teacher ratios ought to be correct.

### 4.3.2 Structural differences

***Length of programme and enrolment***

The relatively low position of the UK on the indicator can be explained by the relative short duration of the upper secondary programmes. Another important factor in this respect may be the fact that grade repetition in the UK is much less frequent than in Germany, Flanders and the Netherlands (see next section).

Another important factor is the relative size of the school age population. The table above shows the relative size of the population aged 15-19. This hardly differs between the five countries. Except for Germany, the relative size of the 15-19 year-olds in 1990 exceeded that of 1996 in each country. The expectation for the near future is that the relative size of the population aged 15-19 will increase in all countries except Belgium.

***Time to complete and drop out***

Participation rates may be either overestimated or underestimated. An example of an overestimated rate of participation in the case of secondary education may be grade repeating. An example of underestimated participation may be dropout. It is particularly difficult to obtain precise information on the amount of dropout in a country, especially if it is to be comparable across countries. For the moment we have to settle for relatively crude measures such as the percentages of students not enrolled at a particular age.

A little more information is available on the above mentioned example of overestimated participation, namely grade repetition. Grade repetition is forbidden in two countries to which this report relates: Sweden and the United Kingdom. The table below relates to students who participated in "TIMSS" (Third International Mathematics and Science Study). This study aimed at 13-year-olds. It shows the percentages of students at least 8 months older than the average in the grade concerned.

Table 4.13: Percentage "over aged" students (TIMSS sample 13-year-olds)

| | |
|---|---|
| NL | 18.6 |
| D | 16.8 |
| S | 3.3 |
| FL | 17.4 |
| UK (Eng) | 1.0 |

Source: Education Policy Analysis 1997 (OECD), p. 122

The data in the above table should not straightforwardly be interpreted as indicator of grade repeating in lower secondary education. They reflect in part the amount of grade repetition in primary education. Still, the countries that stand out because of low percentages "over aged" students are the countries where grade repetition is forbidden in secondary education. The scores of Germany, Flanders and the Netherlands in the above table are very similar. The table below provides a more detailed comparison of grade repetition in Flanders and the Netherlands. The figures are in line with those in the previous table in that the figures for both countries are quite similar.

Table 4.14: Grade repetition in Flanders and the Netherlands

| Grade | ***Netherlands*** | | | | | ***Flanders*** |
|---|---|---|---|---|---|---|
| | "Brugjaar" | VBO | MAVO | HAVO | VWO | |
| 1 | 3.1% | | | | | 3.4% |
| 2 | 5.1% | | | | | 5.6% |
| 3 | 11.1% | 7.9% | 11.0% | 7.6% | 3.2% | 7.3% |
| 4 | | 3.9% | 7.4% | 18.5% | 10.7% | 7.1% |
| 5 | | | | 9.1% | 11.1% | 9.2% |
| 6 | | | | | 6.5% | 3.6% |

Source: Dutch ministry of education, culture and sciences

It seems that because of the differences in grade repetition between Sweden and the UK on the one hand and Germany, Flanders and the Netherlands on the other, the costs per student may also have some shortcomings as well. It needs to be mentioned, though, that in Sweden many students take an extra year in the "Grundskola". Often this is necessary to meet the requirements for entering into further education. In England and Wales there is hardly any grade repetition either, but students enjoy a great deal of liberty in choosing the number and kind of examination subjects. Furthermore it is possible to take an examination at different levels.

Table 4.15: Students not enrolled (1995)

| | ***Final legal compulsory schooling age*** | ***Typical graduation age, upper secondary*** | ***Not enrolled at:*** | | |
|---|---|---|---|---|---|
| | | | ***Final legal compulsory schooling age*** | ***Age 17*** | ***Typical graduation age, upper secondary*** |
| NL | 18 | 18-19 | 17.5% | 6.7% | 23.7% |
| D | 18 | 19 | 15.7% | 6.4% | 34.6% |
| S | 16 | 19 | 3.0% | 4.2% | 64.7% |
| FL | 18 | 18-20 | 12.5% | -0.1% | 22.9% |
| UK | 16 | 16-18 | 13.1% | 21.4% | 44.4% |

Source: Education Policy Analysis 1997 (OECD)

Students not enrolled may be used as a proxy for the example of underestimated participation. On two of the three measures the Dutch score is quite high (students not enrolled at the final legal compulsory schooling age; students not enrolled at age 17). The Dutch score is below average, however, if we look at the percentage of students not enrolled at the typical graduation age. The above data do not allow for a clear conclusion on the amount of drop-out in the Netherlands as compared to other countries. Each of the three measures is at best an approximation of real drop-out rates: the percentage of students leaving school without

qualification. The figures in the above table only relate to the numbers of youth not enrolled at a particular age.

### 4.3.3 Policy

A recent policy change in the Netherlands is the publication of school results (the so-called "kwaliteitskaarten" or quality charts first issued in 1998). For each general secondary school data are published with regard to aggregate examination scores, pass rates and the time students need to complete the curricula. This policy can be considered as an attempt to introduce market mechanisms into the field of education. At least three categories of argument in favour of publishing school results can be distinguished. First of all, information on school results may help parents in choosing a school for their children. In the second place this information may serve as an external check on the quality of education. If the results of a school are below standards, the school will have to account for that. Thirdly, public school results may serve as a basis for self-evaluation and school improvement.
In the UK school results on national exams have been published since 1992 both by the government and national newspapers. These are known as the "league tables" or "performance tables". Their impact is believed to be considerable, but they have also been heavily criticised mainly because the presented figures have not been corrected for intake differences between schools. A negative side effect is that some schools may avoid admitting at-risk students. The need for information about the progress schools help pupils to make relative to their starting point has been acknowledged by the government. In 1998 the so-called "Value added pilot project" was started aiming to develop measures on the progress pupils make during their stay in secondary education. A similar project is now under way in the Netherlands. In Sweden examination results are published for lower secondary education. These are not corrected for intake differences between schools.
In Germany it is forbidden by law to publish school data on examination scores. Educational policy varies between the German federal states (Länder). Some have national exams (e.g. Bayern and Baden-Württemberg), but others (e.g. Nordrhein-Westfalen) do not have national examinations. In those federal states where national examinations are absent it does not seem very useful to publish school results anyway, as the data are hardly comparable across schools. In Flanders, school results are not published either. Just as in several of the federal states in Germany, Flanders has no national examinations.

### 4.3.4 Changes in the factors described above

***Possible effects on expenditure in secondary education***

+ means that expenditure might increase if this factor could be controlled for adequately.
- means that expenditure might decrease if this factor could be controlled for adequately.

| | NL | D | S | B/Fl | UK |
|---|---|---|---|---|---|
| Private Institutions | 0 | 0 | 0 | 0 | + |
| Transportation | - | 0 | 0 | 0 | 0 |
| Length of programmes | Impact varies depending on what part of secondary education a particular cost indicator relates to (e.g. only lower secondary or both lower and upper secondary; only general or both general and vocational secondary education) | | | | |
| Teacher salaries | - | - | + | 0 | ?? |
| Instruction supplied per teacher | + | 0 | - | 0 | ?? |
| Teaching time per student | + | + | + | - | ?? |

***Possible effects on participation in secondary education***

+ means that participation might increase if this factor could be controlled for adequately
- means that participation might decrease if this factor could be controlled for adequately.

| | NL | D | S | B/Fl | UK |
|---|---|---|---|---|---|
| Counting part-time students | - | 0 | 0 | - | 0 |
| Length of programmes | 0 | 0 | 0 | 0 | + |
| Time to complete (grade repetition) | - | - | - | - | ?? |
| Drop-out | ?? | ?? | ?? | ?? | ?? |

## *4.4 Overview*

| | |
|---|---|
| Part-time students | Possible overestimation in the Netherlands and Flanders as each part-time student is counted as 0.5 FTE. In Sweden FTE's are based on hours attended. No part-time students reported in Germany and the UK Problems in both the Netherlands and UK with distinction between lower and upper secondary education for adult students. |
| Participation | Enrolment rates at age 15-19 in secondary education are relatively high in the Netherlands. Only the Belgian rates are higher. |
| Grade repetition | The amount of grade repetition in the Netherlands is similar to the situation Flanders and Germany. Although grade repetition hardly exists in Sweden, many students take an extra year before entering further education. |
| Students not enrolled | The available data do not allow for a firm conclusion on dropout rates in the Netherlands as compared to other countries. |