# Current Education Statistics 

## Flow of pupils and students through the educational system 1989-1997

## $2 / 2001$

## Current Education Statistics

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## Preface

## 1. Introduction

Formal education is viewed as both an important individual achievement and a collective social benefit. A person who is well educated will usually be more able to participate actively in society (e.g. in organizations), and it is assumed that the general quality of life is enhanced. On a higher social level it is common to focus on the correlation between an increasingly better-educated workforce and continued economic growth and development.

One of the most important education policy goals of the last few decades has been to give all young people an equal right to education. Neither gender, nor residence nor social background should hinder young people from getting a secondary or tertiary education. In 1948 the State Education Loan Fund was established. It was an important means of lowering the barrier to educational institutions for young people from low-income families.

### 1.1. Reforms

A number of educational reforms were implemented in the 1960s and 1970s. Everyone was given the statutory right to a nine-year compulsory (primary and lower secondary) education, the old grammar school and vocational school were replaced by a new upper secondary school, the establishment of regional colleges and the University of Tromsø helped considerably to increase the capacity of tertiary education, and the expansion of adult education programmes took off. The stream of young people into the educational system increased particularly from the end of the 1960s. Grammar schools, universities and college were in reality opened to large parts of the youth cohorts.

The development of the modern industrial society and gradual transition to a post-industrial service and information society created a need in the 1980s and '90s for several reforms of the educational system. Much of the research on education revealed inefficiency and irrational use of resources in the system. In 1994, Reform 94 was implemented in upper secondary education. Everyone between the ages of 16 to 19 was given the statutory right to a three-year (four-year) upper secondary education leading either to qualification for tertiary education or vocational skills. That same year most of the public colleges were merged into 26 larger state colleges. Three years later compulsory schooling was extended to 10 years.

### 1.2. Choice of education and social background

Research on recruitment to upper secondary and higher education has shown that despite all the declared political goals of "equal right to education" and the expansion of educational institutions, there are still major differences in recruitment to the various academic and vocational programmes from the different socio-economic and socio-cultural groups. Somewhat simplified, we can say that gender, and virtually also where one lives, mean little today with respect to the opportunity of getting an upper secondary and higher education. Social background still means a lot, but is subject to the variables that are chosen for operationalizing social background. The significance of social background can be explained in many ways.

Despite all the financial support schemes, it costs money to get an education, especially a higher education. The burden of debt mounts, and there are various degrees of acceptance in various segments of the population with regard to borrowing large sums of money to go to school. In comparing different types of upper secondary and higher education from a more or less rational economic cost-benefit viewpoint, the expected yield in the form of pay and other benefits of a career following the completion of one's education is weighed against the financial costs of getting an education. Such profitability considerations may in addition be accorded different weights in the various social classes.

The main factor today, however, is probably the home environment and the impact it has on the educational choices of a young person. Those who have parents with a tertiary education and considerable cultural capital, i.e. wealth in the form of knowledge and ideas (Bourdieu 1984, in Marianne Nordli Hansen 1999,) and who perhaps preferably socialize with other people of the same age with the same background, often live in the same value and norm system. Part of this system encompasses a homogeneous attitude towards getting a formal education. As a rule, these young people will consequently have, to a far greater extent than others, the prerequisites and motivation to go far in the educational system. Briefly and somewhat simplified, it can be said that the cultural basis of the home environment combined with the abilities and aptitudes of the individual probably have the greatest impact on the educational choices that are made.

### 1.3. Data basis, operationalizing of social background

On the basis of Statistics Norway's data on education we will take a closer look at the correlation between education/choice of education and social background (see box about the statistics on page 4). While the main emphasis will be placed on the flow of pupils through upper secondary education, higher education will also be addressed. The 1989 lower secondary school cohort will be followed through the educational system, and some comparisons will be made with the lower secondary school cohorts from 1991 and 1994. It is particularly interesting to compare the latter cohort with previous cohorts because the 1994 cohort was the first to go on to upper secondary school following Reform 94.

Social background in our context is synonymous with the educational level of the parents, i.e. the parent with the highest level of education. It is obvious that more variables must be included in a more extensive study of education and social background, but it is known that the educational level of the parents is the single variable with the most impact on educational choices, and we will therefore occasionally use the concepts "social background" and "social class" in referring to the educational level of the parents.

The following presentation is not meant to be an analysis, but rather a contribution to and point of departure for future analyses. The text is therefore mainly a description of correlations in tables and figures, and concrete examples from existing research work are drawn on only to a lesser extent. An exception is the article "Utdanningspolitikk og ulikhet" (Education Policy and Inequality) by M.N. Hansen in Tidsskrift for samfunnsforskning 2/1999 (Journal of Sociological Research), which has been extremely useful for the preparation of the chapter on tertiary education.

Table 1.1. Pupils who finished lower secondary education in 1989, 1991 and 1994, by the educational level of parents

| Educational level of parents | Completed lower secondary education |  |  |
| :---: | :---: | :---: | :---: |
|  | 1989 | 1991 | 1994 |
| All .................................. | 61117 | 56312 | 52294 |
| Postgraduate degree ........ | 4145 | 4189 | 4400 |
| Undergraduate degree ...... | 12016 | 11862 | 12622 |
| Upper secondary education | 32494 | 30096 | 27343 |
| Lower secondary education | 8086 | 6146 | 3995 |
| Unknown ......................... | 4376 | 4019 | 3934 |

## About the statistics

These statistics are based on Statistics Norway's data on education. These are individualized data and give us the opportunity to track pupil cohorts through the educational system. Data are obtained from various registers and from the individual schools. Information about the educational level of the pupils, students and parents is obtained from Statistics Norway's register of highest education completed. Tertiary education is often divided into two main categories. Persons with a post-graduate degree have completed a tertiary education with duration of $41 / 2$ years or more, and those with an undergraduate degree have completed a tertiary education with a duration of 4 years or less.

## 2. Flow of pupils through upper secondary education

One of the main reasons for Reform 94 in upper secondary education was the poor flow of students through the old upper secondary school system. Several studies showed that this was particularly the case in the vocation-related courses of study. Under the old structure, students could choose among 113 foundation courses, nearly all vocational. For many, vocational specialization started the first year after the completion of lower secondary school. This placed particularly great demands on the ability of students and parents to make the right choice with respect to completing a vocational education. The range of choices caused great uncertainty and frustration among many students, who moved by and large horizontally instead of vertically through the educational system. Consequently, it could take a long time to complete upper secondary school. Another weakness of the structure that existed before Reform 94 was the lack of pupil and apprenticeship places at the upper secondary stage II level in certain fields. As a result, not all of the students who wanted a full upper secondary education could obtain it.

In Reform 94 many of the old foundation courses were merged and changed so that the total number of foundation courses was reduced to 13 . Further vocational specialization was then postponed until the upper secondary stage I level. Because everyone between the ages of 16 and 19 has the statutory right to a threeyear (four-year) upper secondary education, no one should be prevented from achieving a full upper secondary education leading to qualification for higher education or vocational skills. In the following chapters we will examine aspects of the flow of pupils through upper secondary education in general and in the general area of studies in particular by tracking the lower secondary school cohorts of 1989, 1991 and 1994 through the educational system.

### 2.1. Fewer pupils with parents with a lower secondary education, more students with parents with a tertiary education

In comparing the school-leaving cohorts it is important to point out that there is a completely different number of pupils in each social class each year. In all of the school-leaving cohorts, however, pupils with parents with an upper secondary education accounted for more than half of the pupils. The percentage of pupils with parents with an undergraduate or post-graduate degree rose, while the percentage of pupils with parents with a lower secondary education was sharply reduced. In the 1989 cohort, nearly twice as many pupils had parents with a lower secondary education than a post-graduate degree. In the 1994 cohort, more pupils had parents

Figure 2.1. Pupils who finished lower secondary education 1989, 1991 and 1994, by educational level of parents. Per cent

with a registered post-graduate degree than with a registered lower secondary education. The relative importance of the overall transition figures for pupils with parents with little education has therefore been reduced, while it is increasing for pupils with parents with a tertiary education.

The main reason for the changes is the annual rise in the educational level of the age group in the population that has children of primary and lower secondary school age. The parent generation is becoming steadily better educated, and soon there will hardly be any parents of children in primary and lower secondary school with only a lower secondary education. Changes in the social background of the pupil population can have an impact on the efficiency of the overall journey of pupils through the educational system. Given these changes, however, the group of pupils with parents with a tertiary education will become less exclusive, elitist and homogeneous, while there is reason to believe that the smaller group of pupils with parents with a lower secondary education are gradually becoming a more uniform and disadvantaged group. The group with an unspecified education consists mainly of parents with an immigrant background.

### 2.2. Still a clear correlation between social background and number of foundation courses started

In 1989 just over 61000 pupils finished lower secondary school, in 1991 slightly more than 56000 and in 1994 just over 52000 . The differences in the number of pupils is mainly due to changes in the size of the cohorts.

Fewer and fewer graduates of lower secondary school do not start a foundation course in upper secondary school. Just over five per cent of the 1989 graduates had not started a foundation course in the course of the four subsequent years. The number was reduced to 3.5 per cent for the 1991 cohort and to just 1.7 per cent for the 1994 cohort, the first cohort to go on to upper secondary school under the Reform 94 structure. Practically all lower secondary pupils now go on to upper secondary school.

In the 1989 cohort there was, compared to other pupils, a far larger percentage of pupils with parents with only a lower secondary education who had not started a foundation course after four years. Nearly 12 per cent of the pupils with parents with a lower secondary education did not start any foundation course, while the corresponding figure for those pupils with parents with an undergraduate or post-graduate degree was two and 1.3 per cent respectively. The percentage for young people with parents with an upper secondary education was between these two poles for both the 1989 and 1991 cohort. In the 1994 cohort more than four per cent of pupils with parents with a lower secondary education had still not started a foundation course at upper secondary school four years after the completion of lower secondary school. The percentage for the remaining pupil population was one to two per cent.
 education in 1989, 1991 and 1994 and had not started a foundation course after four years, by educational level of parents. Per cent

Educational level of parents

Finished lower secondary education 1989

Finished lower secondary secondary education 1994

Table 2.1. Pupils who finished lower secondary education in 1989, 1991 and 1994 and who started one foundation course in the next four years, by educational level of parents. Per cent

| Educational level of parents | Started one foundation course |  |  |
| :---: | :---: | :---: | :---: |
|  | 1989 | 1991 | 1994 |
| All .............................................. | 74.1 | 78.4 | 86.0 |
| Postgraduate degree | 88.1 | 90.1 | 93.9 |
| Undergraduate degree | 82.4 | 85.7 | 91.3 |
| Upper secondary education ............. | 71.9 | 76.5 | 84.5 |
| Lower secondary education ............. | 62.7 | 66.8 | 73.6 |
| Unknown ..................................... | 74.6 | 76.3 | 83.6 |

As tables 2.1 and 2.2 show, there was a much higher percentage of lower secondary school pupils with parents with a lower secondary school education who started two or three foundation courses in the course of a four-year period than of pupils with parents with a tertiary education. Of the 1989 cohort, nearly 23 per cent of pupils with parents with a lower secondary school education started two foundation courses, as did nearly 21 per cent of pupils with parents with an upper secondary education. The corresponding figure for pupils with parents with a post-graduate degree was only 9.5 per cent.

The figures show that changing subjects at the foundation course level varies considerably with the social background of the pupils. The children of parents with little education tended to move horizontally through the system at the foundation course level. They were uncertain in their choices, had to change their subjects and therefore spend longer time than others at this level in the educational system.

| Educational level pf parents | Number of started foundation courses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 |
| All 1989. | 5.2 | 74.1 | 18.8 | 1.8 | 0.2 |
| Postgraduate degree ......... | 1.3 | 88.1 | 9.5 | 0.9 | 0.1 |
| Undergraduate degree ....... | 2.0 | 82.4 | 14.3 | 1.1 | 0.1 |
| Upper secondary education | 4.9 | 71.9 | 20.9 | 2.1 | 0.2 |
| Lower secondary education | 11.8 | 62.7 | 22.7 | 2.5 | 0.3 |
| Unknown.. | 7.2 | 74.6 | 16.5 | 1.7 | 0.0 |
| All 1991 ... | 3.5 | 78.4 | 15.8 | 2.0 | 0.3 |
| Postgraduate degree .......... | 1.6 | 90.1 | 7.2 | 0.8 | 0.2 |
| Undergraduate degree ....... | 1.7 | 85.7 | 11.2 | 1.2 | 0.2 |
| Upper secondary education | 3.2 | 76.5 | 17.8 | 2.2 | 0.3 |
| Lower secondary education | 8.5 | 66.8 | 20.8 | 3.3 | 0.6 |
| Unknown. | 5.6 | 76.3 | 15.5 | 2.4 | 0.2 |
| All 1994 .......................... | 1.7 | 86.0 | 10.2 | 1.6 | 0.5 |
| Postgraduate degree ......... | 1.9 | 93.9 | 3.6 | 0.5 | 0.1 |
| Undergraduate degree ....... | 1.0 | 91.3 | 6.8 | 0.7 | 0.2 |
| Upper secondary education | 1.3 | 84.5 | 11.7 | 1.9 | 0.5 |
| Lower secondary education | 4.3 | 73.6 | 17.6 | 3.3 | 1.2 |
| Unknown ......................... | 3.6 | 83.6 | 10.0 | 2.3 | 0.5 |

From the 1989 cohort to the 1991 cohort the corresponding percentages in all pupil groups (except for unspecified) was reduced by two to three percentage points. In all social classes, rather more of the 1991 cohort started only one foundation course. Subject changes at the foundation course level were consequently reduced from the 1989 cohort to the 1991 cohort, but the differences between pupils with different social backgrounds was so to speak not reduced.

The number of subject changes at the foundation course level was even lower for the 1994 cohort, the first under the Reform 94 structure. What is most noteworthy is that the biggest reduction took place in the social classes which from before had a relatively low percentage of pupils who embarked on two or more foundation courses in the course of the first four years after the completion of lower secondary school. Thus the percentage of pupils with parents with a post-graduate degree who began two foundation courses went down from 7.2 to 3.6 per cent and in the pupil group with parents with an undergraduate degree from 11.2 to 6.8 per cent. The corresponding reduction in the pupil group with parents with an upper secondary education was from 17.8 to 11.7 per cent and in the pupil group with parents with a lower secondary school education only from 20.8 to 17.6 per cent. The percentage who started three foundation courses also changed the most among pupils with parents with a tertiary education, but here the figures are relatively low and the effects are less marked.

As it turned out the implementation of Reform 94 with fewer and broader foundation courses led to fewer changes of subjects at the foundation course level, but that, at least in the first instance, it was pupils with parents with a higher education who "profited". A very high number of pupils with parents with a lower secondary school education continued to wander around at the foundation course level, even after the introduction of Reform 94. For many in this group it seemed that although the threshold to upper secondary school was lowered, life within the system was almost as equally problematic as before. Studies of subsequent cohorts will show whether this trend holds. As previously mentioned, it is, however, important to emphasize the numerical reduction in the pupil group with parents with a lower secondary school education and the fact that this group in the 1994 cohort was overall therefore somewhat more disadvantaged than the two other pupil cohorts studied.

To obtain a more complete picture of pupil flow we will now look briefly at how long it takes pupils to complete an upper secondary education.

### 2.3. The 1989 cohort. Pupils with parents with a tertiary education finish school the fastest

Around 30 per cent of all pupils who finished lower secondary school in 1989 had not completed an upper secondary stage II education eight years later. This applied to fully 54 per cent of pupils with parents with a lower secondary school education and only 11.1 per cent of pupils with parents with a post-graduate de-

Figure 2.3. Pupils who finished lower secondary education the spring of 1989 by number of years before completion of upper secondary school stage II and educational level of parents. Cumulative per cent

gree. For pupils with parents with an undergraduate degree the corresponding percentage was 16.5 , and 31.5 per cent for pupils with parents with an upper secondary education. The difference in pupil flow between pupil groups is in other words very large. As we saw in the previous chapter, not more than about 12 per cent of the 1989 cohort with a lower secondary school education did not start a foundation course in the course of four years. Given that more than half of this pupil group had not completed an upper secondary education at the stage II level eight years later, it must be said that pupil flow and completion rate are very poor.

## About the statistics

A cumulative percentage distribution shows how large a share of a population has the relevant value or lower. In our case let us take an example that shows that the cumulative percentage is 70 per cent at five years, i.e. that 70 per cent of the cohort has finished an upper secondary education in five years or less. If the cumulative breakdown is compared with several different populations in the same figure, e.g. by social background, the curve that is the highest at any one time illustrates the fact that, compared with the other populations, a larger share of this population is finished with upper secondary school.

It is also worth emphasizing that one in three in the pupil group with parents with an upper secondary education had not completed an education at this level. This group makes up just over half of the pupil group and is the largest and most dominant group. Compared with how many of these pupils had not begun a foundation course, there were fully six times as many who had not completed an upper secondary stage II education after eight years, i.e. their passage through the system was extremely slow. As previously mentioned it is important to point out that upper secondary stage II programmes were not available in all subject areas. The distribution of the pupils by field of study means a lot. If a large number of pupils with parents with little education choose/chose areas of study with shortfalls at the upper secondary stage II level, the pupil flow of this group is affected. To a far greater degree than others, pupils with parents with a higher education choose/ chose general studies (see figure 2.5) through which pupil flow traditionally has been better than in vocational fields of study, where there has been a shortage of pupil places.

Around 69 per cent of the 1989 lower secondary school cohort that had completed a three-year upper secondary education in eight years, had completed it in three years, and 16 per cent after four years. Among those with parents with an upper secondary education the percentages were near the average, while for the pupils with parents with a lower secondary education they were 55.4 and 19.5 per cent, i.e. one in four in this group who had completed an upper secondary education at the stage II level after eight years, had spent more than four years. Among pupils with parents with a higher education, most had completed after four years, in fact all of 80.9 per cent of pupils with parents with a post-graduate degree had finished after only three years.

Pupils taking general studies spend the shortest time finishing the three-year curriculum. As many as 84 per cent of pupils in the 1989 cohort who had completed the general studies programme in the course of eight years had finished in three years, and 12 per cent in four years. Although pupil flow through the system was poorest among pupils with parents with a lower secondary education, the difference between the different groups of pupils was relatively small. Once the pupil has begun a general studies programme, social background appears to have relatively little impact on pupil flow through the system.

### 2.4. Different choices of upper secondary education in various social classes

The choice of field of study is very different in the various social classes.

Figure 2.5 shows that of the entire 1989 cohort, 32.8 per cent had finished a general studies programme three years after the completion of lower secondary school. The corresponding figure for the 1991 cohort was 34.6 and 45.7 per cent for the 1994 cohort. The latter figure is much higher than for the two other

Figure 2.4. Pupils who completed lower secondary education in the spring of 1989 and had finished an upper secondary stage II education in 1997, by number of years before completion and the educational level of the parents. Cumulative per cent

years primarily because under Reform 94 the old business and clerical programme and old general studies programme were merged into a new field for general and business studies. Since 1994, the general studies programme has also included the music, dance and drama line and the sports and physical education line.

In all three years there was a somewhat smaller percentage of pupils with parents with an upper secondary education who finished a three-year general studies

Figure 2.5. Pupils who completed general upper secon dary education three years after finished upper secondary school by the educational level of the parents. 1989, 1991 and 1994. Per cent


Educational level of parents

education after three years compared with the average for the entire pupil population. Among pupils who finished lower secondary school in 1989 and 1991, 65 to 66 per cent of pupils with parents with a post-graduate degree and 50-51 per cent of pupils with parents with an undergraduate degree completed the general studies programme in three years. Among pupils with parents with only a lower secondary education, the percentages were just 11.3 and 13.5. This is firstly an expression of the major differences in the education choices of young people of different social backgrounds. The relative differences between the groups was somewhat reduced for the 1994 cohort, but was still very large. The difference for the 1994 cohort was also nearly 50 percentage points between pupils with parents with a lower secondary education and pupils

Table 2.3. Pupils who began a general studies programme the same year as they finished lower secondary education, and finished their studies after three years, by educational level of parents. 1989, 1991 and 1994. Per cent

Finished lower secondary education

|  | Finished lower secondary education |  |  |
| :--- | :---: | :---: | :---: |
| Educational level <br> of parents | 1989 | 1991 | 1994 |
| All ........................................... | $\mathbf{8 1 . 0}$ | $\mathbf{8 0 . 3}$ | $\mathbf{8 3 . 2}$ |
| Postgraduate degree ............. | 81.0 | 81.1 | 82.3 |
| Undergraduate degree ............. | 82.6 | 81.4 | 84.7 |
| Upper secondary education ...... | 81.0 | 80.6 | 83.5 |
| Lower secondary education ...... | 70.3 | 70.3 | 74.2 |
| Unknown ............................... | 82.5 | 78.5 | 81.7 |

with parents with a post-graduate degree.
In this section we will focus on the pupils who began a general studies programme the same autumn as they finished lower secondary school and completed their studies three years later. Beginning in 1994 the general studies lines covered far more pupils than in previous years. This is due as previously mentioned to the merger of old foundation courses in 1994. Specialization within a field of study took place in part at the upper secondary stage I level, but primarily at the upper secondary stage II level. Eighty-one per cent of the entire 1989 cohort who began general studies the same year had finished the three-year course of study three years later. The percentage was just over 80 in all social classes with the exception of the pupils with parents with a lower secondary education, in which the share was 10 percentage points lower. These shares changed little from the 1989 cohort to the 1991 cohort. On the other hand, there was a certain increase for the 1994 cohort. More than 83 per cent of the school-leaving cohort from this year who started general studies the same year had completed their studies in three years. In the group with parents with an undergraduate degree the share was all of 84.7 per cent, while in the group with a lower secondary education the percentage
was 74.2.

The merger of the foundation courses in 1994 appears at least not to have had a negative impact on pupil flow through the general studies programme. It is not that easy to do pupil flow comparisons with the old business and clerical programme because it was natural in this field of study for a number of pupils to finish school after completing a foundation course or upper secondary stage I. There was also a lack of places in some schools. "Secretarial pupils" virtually disappeared from the new general studies programme. Today the business and clerical subjects have a four-year curriculum that concludes with a traineeship. Although this applies to few pupils it affects the pupil flow figures when the focus is only on the pupils who finished upper secondary school three years after completing lower secondary school.

What percentage of the cohorts go on to college or university?

## 3. 1989 lower secondary school cohort in tertiary education

The 1989 lower secondary school cohort has been tracked until 1997, and we have looked at how many have obtained one or another form of tertiary education in the period. We have furthermore focused on the pupils who completed a general studies programme in 1992 and studied their journey through tertiary education.

## About the statistics

Upper secondary school level II covers academic and vocational programmes with a duration of 3 or more years
University and college level I covers fields of study with a duration of 2 years or less University and college level II covers fields of study with a duration of $2 \frac{1}{2}$ to 4 years University and college level III covers fields of study with a duration of $41 / 2$ or more years

### 3.1. High level of education of parents equals many years in tertiary education

In our data material, pupils from the lower secondary school cohort of 1989 would have been enrolled in higher education for a maximum of six years. Among the majority of boys, the required one year of national service (military or non-military) can also lead to a one-year delay in college or university studies.

Figure 3.1. Pupils who finished lower secondary education in the spring of 1989, by how many years enrolled in tertiary education until 1997 and educational level of parents. Per cent


Figure 3.1 shows that the higher an education the parents have, the longer the pupils from the 1989 lower secondary school cohort have stayed in tertiary education. While just over 56 per cent of the entire pupil cohort were not enrolled in tertiary education at all from 1992 to 1997, the corresponding share for those with parents with a post-graduate degree was only 18.7 per cent and 34.7 per cent for those with parents with an undergraduate degree. The corresponding percentage for those with parents with an upper secondary education was 62.8 per cent and all of 82.8 per cent for students with parents with a lower secondary education. More students with parents with a tertiary education than the other students have also been enrolled in higher education for many years, which shows that they enrol in lengthy and prestigious academic degree programmes at universities and university-level colleges. This is also the conclusion of M. N. Hansen's study of the social background of students enrolled in various university and college degree programmes. There is also reason to believe that the differences between the pupil groups is even greater than that shown in figure 3.1, since foreign students are not included in the figures. Many of them earn professional degrees in engineering, business administration or medicine, studies that traditionally have had an extremely lopsided recruitment in terms of social class. For this reason the

Figure 3.2. Pupils who finished lower secondary education in 1989 and completed a general studies programme in 1992, by how many years enrolled in tertiary education and the educatio nal level of the parents. Per cent

numbers in figure 3.1 are somewhat too low, particularly for those with parents with a tertiary education.

If we only concentrate on the pupils who completed the general studies programme in 1992, the figures will naturally be higher. These pupils account for the majority of the 1989 cohort that qualified for tertiary education in 1992 and, as we saw earlier, pupil flow through the general studies programme was relatively good in all social classes.

The subsequent passage of these pupils through the educational system has clearly been very different for the various social classes. Only 7.9 per cent of those with parents with a post-graduate degree had not been enrolled in higher education in the subsequent six years while one in three of those with parents with a lower secondary education had never studied at a university or college. Corresponding figures for those with parents with an undergraduate degree were 12.6 per cent and 23.1 per cent for those with parents with an upper secondary education. The average was 17.8 per cent.

Overall, the majority had been enrolled in tertiary education for four or five years. The majority had been enrolled for three or four years among both those with parents with a lower secondary education and those with parents with an upper secondary education. For those with parents with an undergraduate degree the corresponding figures were four and five and five and six for those with parents with a post-graduate degree. The number of years in tertiary education also increases with the rising level of education of the parents when those who had completed the general studies programme in 1992 are looked at separately. The lopsided recruitment to tertiary education is perpetuated by the choice of tertiary education. Those with parents with a tertiary education choose lengthy university and college degree programmes while those who have parents with a lower education have a tendency to choose a shorter course of study once they decide on a tertiary education. In this study we have not examined how many have interrupted their studies, retaken subjects or changed degree programmes. This also has an impact on the number of years the student was enrolled in higher education, but does not weaken the main conclusion drawn on the basis of the numbers.

### 3.2. Highest educational level in the highest social classes

In 1997 there was a huge difference in the registered level of education of the various social classes of the 1989 lower secondary school cohort. As the result of many years in tertiary education among those with parents with a tertiary education, many in this group of pupils had completed a university or college level I or II education. Fully 60 per cent of those with parents with a post-graduate degree (for descriptions of educational levels see the box on page 12) fit into this category. Among those with parents with a lower secondary edu-
cation, only one in 10 had completed a tertiary education at this level in 1997. Even though it is necessary to wait a couple of years to draw any conclusions for university and college level III and the figures are consequently provisionally extremely low for completed degrees at this level, we can ascertain even greater differences at this level between the various social classes than at the lower levels of university and college. On the basis of the number of years in tertiary education this is not so unexpected.

Students enrolled in professional degree programmes who had not finished in 1997 will, however, be registered as having an upper secondary school level education in figure 3.3. Because recruitment in terms of social class is more lopsided than for college studies of shorter duration (M. N. Hansen), there will be relatively many in the group of pupils with parents with a postgraduate degree who are registered as having an upper secondary school level education. They will go right from this level to university and college level III when they complete their studies. The same applies to many of the foreign students. On the other hand, far more members of the cohort with parents with a lower education will probably have concluded their education at the upper secondary level and will therefore not achieve a higher level of education in subsequent years.

Figure 3.3. Pupils who finished lower secondary education in spring 1989, by highest education completed 1997 and educational level of parents. Per cent


Educational level of parents


If we look only at those who completed the general studies programme in 1992, the percentage of students who completed a degree at the university and college level in 1997 is of course higher. Just over 25 per cent of those with parents with a post-graduate degree had not completed any tertiary education in 1997. The corresponding figure for those with parents with a lower secondary education was over 50 per cent. Pupils with parents in other educational groups occupy an intermediate position, but the trend is clear - the higher the education of the parents the fewer the number of pupils who had an upper secondary education as their highest completed education. On the other hand, the percentage that had completed an education at university and college level II was lower for the highest social class than for the average. There are relatively many college programmes of shorter duration at university and college level II. Most of the 1989 lower secondary school cohort who had completed the general studies programme in 1992 and chose a college degree programme of a shorter duration, probably completed their studies in 1997. As mentioned these studies are not as much in demand in the group with parents with a post-graduate degree.

Figure 3.4. Pupils who completed lower secondary education the spring of 1989 and completed general studies programme in the spring of 1992, by highest education completed and the educational level of the parents. Per cent



At university and college level I and III, the percentage of degrees completed rises with the educational level of the parents. Although there were relatively few who had managed to complete a level III education in 1997, there were great differences among the categories. Very many of those who had completed a degree at the university and college level I had completed a foundation course/intermediate subject and were not yet finished with their university degree. Many of these students were in the process of getting a higher degree. The differences between university and college level I and II are therefore also a partly an expression of the different recruitment by social class to higher education. In order to draw more reliable conclusions about university level III, the 1989 lower secondary school cohort must be tracked for a few more years through the educational system.

## Bibliography:

Hansen, Marianne Nordli: Utdanningspolitikk og ulikhet - rekruttering til høyere utdanning 1985-1996 (Education policy and Inequality - Recruitment to Higher Education 1985-1996), Tidsskrift for samfunnsforskning nr. 21999 (Journal of Sociological Research, no. 2 1999).

