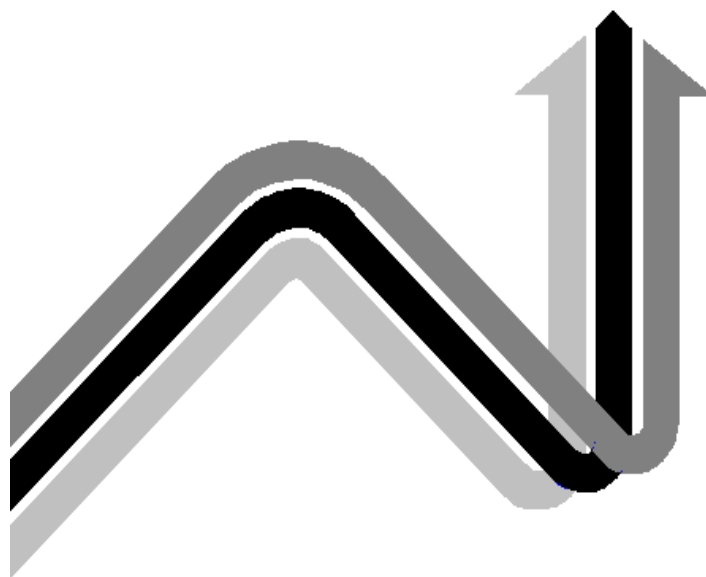


# **THEMATIC REVIEW OF THE TRANSITION FROM INITIAL EDUCATION TO WORKING LIFE**



## **NORWAY**

### **BACKGROUND REPORT**

SEPTEMBER 1997

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## CHAPTER 1: CONTEXTUAL AND INSTITUTIONAL FACTORS

### 1.1 A description of main economic developments

Since 1993 the Norwegian economy has been experiencing a strong cyclical expansion, following several years of sluggish growth. After some *decrease* in growth in 1995, mainland GDP is projected to have increased by 3.7 per cent in 1996 and to increase by 3.3 per cent in 1997. The main growth impulses are expected to come from continued growth in demand from private households. Due to a strong expansion in oil production which constitutes roughly 15 per cent of GDP, total GDP growth equalled 5.3 per cent in 1996. In 1997 and 1998, the expected growth in total GDP is 3.9 per cent and 3.5 per cent respectively. Medium-term projections of a more technical nature for the period 1998 - 2001 show a 1.7 per cent growth in mainland GDP, and a growth of 2.0 per cent in total GDP, reflecting the further expansion of oil production.

The decline in petroleum activity after the turn of the century underlines *the need to maintain good conditions for Mainland industries*, among other things by avoiding a deterioration of competitiveness and maintaining the ability to adjust. This means that great caution is needed in the use of oil revenue in the domestic economy. In order to limit the use of oil revenue domestically and to create a buffer for public finances, the government has put up the Petroleum fund to accumulate financial assets that will allow a smooth adjustment to the new situation. The supply of labour and natural resources will limit economic growth in the longer term, at the same time as profitability requirements and competition for capital will increase. In the future, economic growth will to a greater extent depend on *competence, technology and higher productivity*.

The expansion of the economy has been accompanied by strong growth in employment. Last year, the growth in employment was as high as 2.5 per cent, and in 1997 a growth of 2 per cent is forecasted. The unemployment rate declined from 5.4 per cent in 1995 to 4.9 per cent in 1996, and is expected to continue to fall to below 4 per cent in 1997.

Overall, economic conditions are conducive to further growth in output and employment:

- Since 1989, price inflation in Norway has been generally lower than in our trading partner countries. In 1996 the consumer price inflation was 1.3 per cent. Consumer price inflation is forecast to rise to an average of 2.5 per cent for 1997 due to a number of temporary factors. The rate of consumer price inflation is, however, expected to decline to the levels of our trading partner countries by the end of the year.
- Wages are estimated to increase by 3.5 per cent this year, down from 4.25 per cent in 1996.

- Public finances as shown by traditional measures are strong. The surplus on the general government balance is estimated to increase from about 6 per cent of GDP in 1996 to almost 7 per cent in 1997<sup>1</sup>.

## **1.2 Main trends in overall and youth unemployment**

### ***1.2.1 Economic development and its effect on employment and qualification requirements for young people***

The labour market in Norway is constantly changing with a considerable number of jobs being created and lost every year. We may divide the labour market into different sectors according to job characteristics (i.e. qualifications needed, type of industry etc.), and according to employee characteristics. The changes in the distribution of jobs may change the employment structure and the qualification requirements.

A study<sup>2</sup> of Norwegian manufacturing and service industries during the period 1976-92, shows that the annual job creations and job losses were equivalent to about 7-9 per cent of the total number of jobs in Norway. The study indicates that in the long run the overall tendency is to create jobs which demand more education and more skills, rather than jobs which do not. This has contributed to higher unemployment among persons with little education and few skills. One implication of this development was that young people had more problems in getting into the labour market, because they had not finished higher education and lacked work experience.

However, the business cycle may lead to different developments in the short run. The recruitment study<sup>3</sup> from the Directorate of Labour and Centre of Economic Analysis (ECON) shows that the upswing in the private sector in 1995 is directed towards production related work. The labour demand is consequently for more practically oriented employees rather than for those with higher education. From 1993 to 1995 the relative proportion of jobs where secondary education was regarded as most productive, increased from 35 to 44 per cent. On the other hand the number of jobs where higher education was regarded as most productive, decreased from 59 to 50 per cent. The development must be regarded as positive for young people who wished to enter the labour market in this period. The figures also confirm this. The general economic improvement in this period has caused a considerable decline in unemployment among young persons, especially in the age group 20-24 years.

### ***1.2.2 Main trends in the labour market***

The situation on the labour market improved considerably between 1993 and 1996. According to the national account, employment rose in this period by 121 000 persons (6 per cent). On average 2 137 000 persons, or 67.9 per cent of the working age population (age groups 16-74), were employed in 1996 (See annex I, table 1). Employment rose in most sectors. It increased, however, particularly in the fields of financing, insurance, real estate and in business services. The primary sector continued its downward trend in employment.

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<sup>1</sup> OECD, Economic Surveys, Norway 1997

<sup>2</sup> Salvenes, K. G. (1996), *Job Creation and Job Destruction in Norway 1976-1992*, Norwegian Ministries of Finance, Local Government and Labour, and Industry and Energy, Oslo.

<sup>3</sup> Larsen, K.A. (1996), *Rekrutteringsundersøkelsen 1995. Søking og rekruttering til ledige stillinger*, Arbeidsdirektoratet og ECON, Rapport 1996:2.

At the same time there has been a considerable expansion of the labour force. Total labour force participation has risen sharply, primarily because of a far greater number of women entering the labour market. The labour force participation rate was 71.5 per cent in 1996 (age groups 16-74). This is the highest participation rate ever recorded in Norway. Since 1993 participation rates have increased for most groups in the population (See annex I, table 1).

Unemployment, measured as a share of the labour force, was reduced by 1.5 percentage points from 1993 to 1996. However, decline in unemployment is slower than what might be expected, due to the expansion of the labour force. The unemployment rate fell to 4.9 per cent in 1996 (See annex I, table 1).

Labour market improvements are also shown in the figure from the Directorate of Labour. The figure shows a decline in the number of persons registered as unemployed (See annex I, figure 1). The youth unemployment rate has shown a particularly sharp decline from 10 per cent in 1993 to 6.1 per cent in first half of 1997. At the same time there was a reduction in the number of participants on active labour market programmes.

### ***1.2.3 Main trends in the labour market for young people***

Young people without work experience, or without recognised education have, in a difficult labour market situation, more problems finding work than most other age groups. Annex I, table 2 shows the same indicators on the labour market as annex I, table 1, except for the age group 16-24 years. As regards labour force participation and employment these figures show almost the same development, but not as strong, as for the older age groups. On the other hand, unemployment has fallen particularly for young people. This can be seen more clearly in the figures on registered youth unemployment from the Directorate of Labour than in the figures on youth unemployment from the Labour Force Surveys. In 1993 10 per cent of the labour force below 25 years of age were registered as unemployed as opposed to 6.4 per cent in 1996. The relatively strong decline in youth unemployment since 1993 is due to the business upswing, the fact that labour market schemes give priority to young people, the fact that youths were given a statutory right to upper secondary education, that a greater proportion of those aged 16-19 stayed on and completed upper secondary education, as well as a reduction in the number of persons in the age group 16-24.

When comparing tables 1 and 2 in annex I, it can be seen that the unemployment rate is higher for the age group 16-24 years than for age groups above that age. This can partly be ascribed to the fact that only 59.3 per cent of the age group 16-24 years were in the labour force in 1996, while 81.9 per cent of the age group 25-66 years were in the labour force in the same year.

### ***1.2.4 Measuring methods***

In international comparisons, one normally uses unemployment figures from Labour Force Surveys. There are, however, several problems associated with national comparisons of youth unemployment. Different countries have different definitions, which influence the figures of youth unemployment. For example, young persons who seek work at the same time as they are undergoing training or education, are in some countries not counted as unemployed.

In Norway, however, they are. Also, differences in educational and labour market policies influence the numbers. (See chapter 3 for a more thorough description of unemployment among young people in Norway).

### **1.3 Demography, education and employment**

From the school year of 1984/85 to 1993/94 the year cohorts of 16-year-olds were reduced from approximately 67 500 to 52 300. From 1994 until today, the number has been rather stable on approximately 53 000, and the number is expected to stay stable until 2001/02. After 2001/02 the number is expected to increase, with a peak in 2007/08 of more than 60 000<sup>4</sup>. Due to the small age cohorts when Reform 94 was introduced, the capacity in schools were sufficient to meet the obligation to provide places.

To estimate capacity needs in higher education, the number of 19-year-olds in any given year is of primary importance. The cohorts of 19-year-olds will stay at a level of between 50 000 and 55 000 until 2006, when they will again - like in the early '90s - reach levels of around 60 000. Another important factor concerns the level of unemployment. Overall unemployment went down from 1995 to 1996, while at the same time the share of graduates among the unemployed increased, raising the question of the individual expectations and aspirations in connection with participation in higher education. (See annex III, table 1).

The number of youths below 25 years of age has declined since 1989 and is expected to continue to decline until year 2000. Since the cohorts being retired are small, an increase in the labour force participation is expected. This demographic trend implies less competition for the jobs where employers prefer young people and increased competition for jobs where youths compete with adults.

### **1.4 Broad structure of the education and training system**

#### ***1.4.1 Structure of the educational administration***

The educational system of Norway is mainly public. Due to the fact that Norway has a state religion - the Lutheran Church - a Christian and moral upbringing has been seen as fundamental to the aims of school education. The Ministry of Education, Research and Church Affairs is responsible for administering the educational system and implementing a national policy in this field. The 435 municipalities are responsible for providing primary and lower secondary education. From August 1997, with «Reform 97», all children will start at the age of six and Norway will have 10 years of compulsory school. Primary schools are for pupils of grades 1 to 7, and lower secondary schools are for grades 8 to 10.

The county municipalities own and run upper secondary schools and are responsible for the intake of pupils and the appointment of teachers. Most of the funds come from state grants and the schools are free of charge.

Higher education is directly administered by the Ministry and is mostly state funded, as more than 90 per cent of all students attend state institutions where tuition is free. In addition, several of the private institutions receive most of their funding from the state. (See annex I, figure 2, annex I, appendix I and annex III, figure 1).

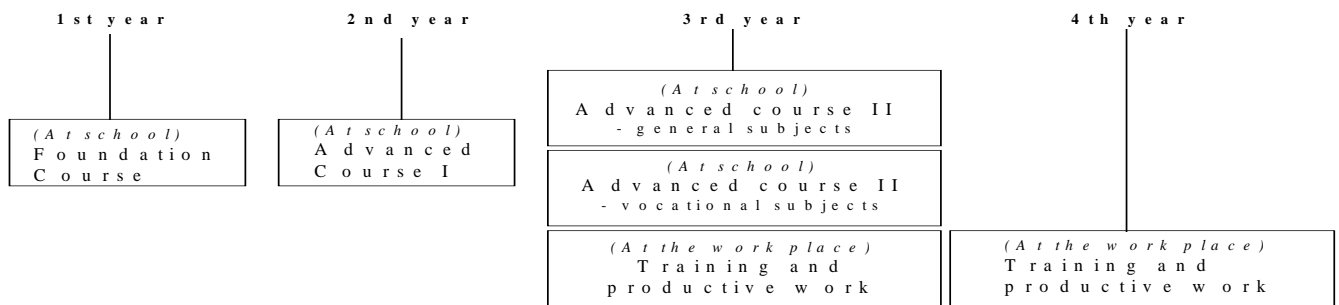
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<sup>4</sup> The numbers are given by Statistics Norway. The numbers are rounded.

### 1.4.2 The structure of upper secondary education

In August 1994, a new system of upper secondary education was introduced in Norway, called Reform-94. A main aspect of the reform is that all young people aged 16 - 19 years have been given a statutory right to 3 years of upper secondary education. The reform of upper secondary education is structural in the sense that it offers a totally new combination of courses and subjects, and that the two systems of general and vocational training have been merged. The first year is a foundation course. There are altogether 13 foundation courses and these replace more than 100 different courses which existed until August 1994. Each foundation course represents an area of study. Three of the areas of study focus on preparing pupils for college and university entrance and the other ten are vocational in character and are leading to a trade or journeyman's certificate or other vocational competence.

The main structure of upper secondary education after Reform 94 can be illustrated as follows:



The structure of upper secondary education is further outlined in annex II, figure 1.

### 1.4.3 The structure of higher education

Higher education in Norway is offered by the following institutions:

- 38 state institutions,
  - of which the *university sector*<sup>5</sup> consists of 4 universities and 6 ‘university colleges’ (specialised national higher education institutions)
  - and the *non-university sector* consists of 26 state colleges ‘*statlige høgskoler*’ and 2 colleges/academies of arts and crafts
- 22 private higher education institutions with recognised study programmes, of which 19 receive state funding for (part of) their activities.

The structure of higher education is described in Annex III, addenda.

<sup>5</sup> With the exception of the Norwegian State Academy of Music, these are the only state institutions that can confer doctor's degrees. (One private higher education institution, the Free Faculty of Theology, may also confer doctor's degrees.)

#### ***1.4.4 The administration of the Public Employment Service (PES)<sup>6</sup>***

The PES in Norway is the responsibility of the central rather than the regional and local governments. The PES has an agency status under the supervision of the Ministry of Local Government and Labour which sets broad policy objectives. The agency consists of 18 county employment offices, 167 district employment offices with 56 sub-offices, 18 employment counselling offices, the Centre for occupational Rehabilitation (Oslo), 18 working life advisory service centres, the PES's Service centre and the PES's Unemployment Benefit Control Office (per 1996). (See annex 1, figure 3).

The Directorate of Labour works to accomplish the objectives laid down in the legislation and policies related to the agency's activities. The Directorate shall monitor developments on the labour market and provide information and advice to the ministry. It is also responsible for implementing labour market policy by proposing, planning, developing and implementing the required measures.

County Employment Offices administrate the activities of the PES at the county level. These offices are responsible for monitoring developments on the labour market and registering the needs of job-seekers and employers for services. The main functions of the offices are to provide guidance, and plan assistance for and control the District Employment Offices. They also plan, develop and co-ordinate measures to reduce imbalances on the labour market.

District Employment Offices provide services to job-seekers and employers. The offices provide information about vacant positions, counselling with regard to occupations and education, and offer and implement relevant measures, such as courses providing qualification and training. The offices organise rehabilitation measures and in-house rehabilitation. The offices visit businesses in their district and procure manpower for employers. The offices administrate the unemployment benefit scheme and rehabilitation benefits.

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<sup>6</sup> The Public Employment Service (PES) is also named the Labour Market Administration (LMA).

## CHAPTER 2: CLARIFICATION OF PERCEPTIONS

### 2.1 Transition from initial education to working life

The concept of transition from initial education to working life has in itself not been in focus in Norway. The government is however, very concerned about young people being able to get a place in secondary or in higher education or a job. The educational system in Norway places a natural focus on the transition concept for age groups when:

- completing compulsory school (at the age of 16)
- completing two years of vocational education in upper secondary school with an apprenticeship contract
- completing upper secondary education at the age of 19 with a school certificate
- completing upper secondary education with a trade or journeyman's certificate
- completing higher education with a lower or higher degree from college or university

The educational level of the population has risen considerably the last decade. In 1995, some 53 per cent of the population had completed upper secondary education and training while 27 per cent had completed a college or university education. It is expected that the level of education will continue to increase. This will obviously affect the transition period.

When discussing the transition concept, it is of essential importance to take into account the flow of pupils and students through upper secondary education and higher education. An effective through-flow will reduce the period of time for transition to working life.

In our context, the term "working life" means: the period when the principle activity is work. Many young people combine education with work. (See annex I, tables 1, 2 and 3). In our definition this is not «working life». We have no evidence of what effect combination of education and work will have on the transition to working life. It may cause a delay in transition, but it may also make it easier to get an ordinary job as they already have some work experience.

#### 2.1.1 *Transition from lower secondary education*

There has been a continuous increase in the transition of 16-year-olds from lower to upper secondary education. In 1980, the rate was 72.1 per cent, in 1990, it was 89.6 per cent and in 1994, the rate was 94.1 per cent. (See annex II, appendix II, tables 1 and 2 and annex II, appendix III, table 1). In 1994, only 5.9 per cent of the 16-year-olds were not attending upper secondary education. In 1993 and 1994, the employment rate of 16-year-olds in full time work was around 1 percent. In addition, some of them were

employed by means of government measures. (See annex 1, appendix II, table 1). Generally, the chances are small for those entering the labour market having compulsory school as their highest level of education.

### **2.1.2 *Transitions from upper secondary education***

Pupils aiming at a trade or journeyman's certificate after the second year of upper secondary education, should normally get an apprenticeship contract. As the third and fourth year of vocational education are combined with productive work, the apprentices are employed with an enterprise. According to our definition, this is not transition to working life. Transition to ordinary work takes place when they are qualified as skilled workers. Approximately 20 per cent of the youth cohort apply for an apprenticeship place. As described in chapter 3 and 5, not all of them obtain a contract.

Those who complete upper secondary education after 3 years and receive a school certificate, may either have a general education or a vocational education. Both groups may enter the labour market.

In 1993 and 1994, approximately 17 per cent of the 19-year-olds were employed. (See annex I, appendix II, table 1).

Those with a general education may also apply for higher education. In the 1990s, there has been a tendency for more direct transitions from upper secondary to higher education: in 1992, 27 per cent of all Norwegian 19-year-olds applied for admission to tertiary education; in 1995, this percentage had increased to 31, and in 1996 to 35. (See annex III, table 1). Due to the fact that many young people postpone enrolment in higher education, the percentage of each cohort entering higher education is estimated to be about 40.

Those who complete upper secondary education with a trade or journeyman's certificate, have the opportunity to enter the labour market as skilled workers. As there seems to be a lack of skilled workers at the time being, it is assumed that the transition period for this group will be short.

### **2.1.3 *Transition from higher education to working life***

The last transition from initial education to working life takes place after finishing higher education with a lower or higher degree. (See section 5.3).

### **2.1.4 *Summing up***

The transition from education to working life may occur at all levels from the age of 16. From the age of 19 years up to 29 years the employment rate of the year cohort increases from approximately 17 per cent to approximately 65 per cent. (See annex I, appendix II, table 1).

## CHAPTER 3: POLICY CHANGES AND CONCERNS ABOUT TRANSITION PROCESSES AND OUTCOMES

### 3.1 Upper secondary education

The previous major reform in upper secondary education occurred in 1976. Until then, there was a variety of schools offering different types of education and training. This was replaced by a single system which provided both an academic education and a vocational education, often in the same school building. General education and vocational education at school were put under one law and under «the same roof».

Vocational training at the workplace was reorganised in 1980. Considerable developments have taken place in our society since then, and there was a need for a new reform. One of the main objectives of the new reform was to make transition from school to work smoother.

#### 3.1.1 *Problems before Reform 94*<sup>7</sup>

A substantial proportion of young people was leaving school without work qualifications or further education opportunities. They were basically trained for unemployment. Young people had less opportunities to receive the place in the upper secondary education of their priority than adults.

The status of vocational courses was declining relative to courses preparing for higher education. Many with vocational education who wanted to go on to college or university had to start again at square one. There were too few apprenticeships available and the links between vocational training in school and industry were too weak.

Too many made the wrong choices from having to specialise too early; there were over 100 different foundation courses, or ports of entry, and not enough advanced courses to make the pupils attain a vocational qualification.

The structure gave too little help for disadvantaged youths, and the drop-outs were not properly followed up.

There were geographical and social inequalities and the educational content and methods were not properly adapted to the needs of the future.

The problems that we had and the solutions we chose were presented to the the Storting (National Assembly) in a white paper in 1992<sup>8</sup>. This white paper formed the basis of the so-called Reform 94.

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<sup>7</sup> The problems described are not to be considered as unique for Norway.

<sup>8</sup> St.meld. nr. 33 1991-92 «Kunnskap og kyndighet - om visse sider ved videregående opplæring».

### **3.1.2 Solutions**

The central principles and goals for national policy concerning education and vocational training in Reform 94 are:

- Education is a public responsibility and it is supplied free of charge. The costs are met by the public budgets.
- Every young person completing compulsory education is entitled by law to three years of upper secondary education leading to either university entrance qualifications, vocational competence or partial competence.
- The supply of education and training shall be of high quality and broad enough to allow for a range of choices independently of geographical and social conditions.

Education and vocational training are also an important means to achieve goals in other policy areas such as economic policy, regional policy and employment/labour market policy.

The goals shall be reached by means of :

- Sufficient number of places.
- A changed educational structure to facilitate progress from one stage to the next.
- Broader education, especially at foundation course level. Fewer ports of entry.
- A broad concept of knowledge is introduced. Factual knowledge, manual skills, ethical values, communicative skills and creativity are all given weight.
- Improved co-ordination between the schools, private enterprises and the public sector.
- All curricula are redesigned to meet future challenges in society and the labour market.
- Easier recruitment to higher education from vocational education and training.
- Establishing a follow-up service for young people who have the right to education, but are neither undergoing education nor employed.
- Access to recognised partial qualifications. Better educational opportunities are provided for adults through modularised curricula, and regional authorities are responsible for offering courses adapted to the needs of adults.

Reform 94 may be described as a reform of rights, a structural reform and a reform of content.

### **3.1.3 The statutory rights and obligations under the reform**

The statutory right includes three years of full-time upper secondary education. The right has to be taken out within a four-year-period, which means that young people's transition from education to working life may be suspended one year.

The statutory right to upper secondary education gives all pupils the right to be admitted to one of three foundation courses chosen by themselves. Those who, with the support of expert opinion, have the right to a special, adapted education, are entitled to be admitted to their first-choice foundation course, and may be given the right to an extended education up to five years.

The 19 county municipalities have an obligation to provide upper secondary education for all pupils between 16 and 19 years of age.

They must also provide an additional number of places for other groups, among those adults, equal to 375 per cent of the number of pupils between 16-19 (i.e. 3 year cohorts).

The county municipalities are also responsible for placing the apprentices with an appropriate enterprise, and this is carried out by the county vocational training committee. The committee is expected to maintain close relations with the enterprises and to co-operate with them in matching the apprentice with the enterprise. However, the enterprises may decide whether they want to take on apprentices or not, and they are free to choose among the applicants. (For further details see annex I, appendix 1).

Each county municipality has a statutory duty to establish a follow-up service. The follow-up service shall contribute to ensuring that young people who have not applied for or accepted a school or training place, who have chosen to terminate their education or training without completing it, or who are not employed, get the opportunity to obtain an education that might lead to a recognised qualification. These young people are offered educational and vocational guidance and, if necessary, a place in upper secondary education, a trainee place or a combination of upper secondary education and a trainee place.

### **3.1.4    *The structural reform***

The main structure of the courses in the reform is illustrated in chapter 1 and annex II, figure 1). The educational structure shall provide pupils with either university entrance qualifications, vocational competence or documented partial competence.

As a general rule, admission to advanced course I within an area of study is based on attending and passing the relevant foundation course. Specialisation within the various subject areas takes place at the level of advanced courses I and II. In subjects covered by the Act concerning Vocational Training, final specialisation takes place primarily in business and industry.

Pupils and apprentices who wish to obtain university entrance qualifications in addition to their trade or journeyman's certificate, may take specially designed supplementary courses in general subjects after the completion of their vocational training. (See annex II, figure 2).

General education may be obtained through three years of education within three areas of study.

#### *Vocational education*

The main model of vocational education consists of two years at school + two years of apprenticeship, the so-called «2 + model». During the two years with the enterprise the apprentice will have one year of training and take part in the productive work for one year. In practice the training and the productive work are mixed throughout the two years. The apprentice is engaged by the enterprise from the first day and is paid an equivalent to one year's salary over two years. The salary is stipulated in the wage agreement of the trade and is about half the amount of what skilled workers get.

Training establishments that provide training for apprentices receive government grants. To encourage the enterprises to take on apprentices, the government grants have under the terms of Reform 94, been substantially increased. Additional grants will be given to enterprises which increase the number of apprenticeships and to enterprises which take on apprentices for the first time. Furthermore, enterprises that take on disabled apprentices get additional grants.

When the training period is completed, the enterprise has no further obligations when it comes to further engagement of the apprentice, as the tradition was earlier.

According to the Act concerning Vocational Training pupils who are not able to obtain an apprenticeship contract, shall be offered a place in an advanced course II at school to complete their training. This group does not receive additional training in an enterprise. They take the same trade or journeyman's examinations as those who follow the «2 + model». A much debated question is whether 3 years of education and training at school gives an education of lower quality than education within the «2 + model».

For some trades there are deviations from the main model.

To meet the needs of young people who have difficulties following the «2+model», certain amendments have been added to the Act concerning Vocational Training. An exception from the «2+ model» can be made for certain categories of pupils who need to follow specific arrangements, because of low motivation for schooling or because they have problems following subjects with a large amount of theory related to the trade. These pupils may enter into an apprenticeship contract providing the complete training in the enterprise.

#### *Special courses for admission to higher education*

A general matriculation standard has been introduced with Reform 94, satisfying formal admission requirements to higher education. (See section 3.2.1). General education is an integral part of vocational training, with common subject syllabuses. (See annex II, figure 2). Those who choose vocational areas of study, may obtain entrance qualifications for higher education by:

- 1 Taking one year in an advanced course II with general subjects after completing two years of vocational education.
- 2 Taking half a year with general subjects after completing vocational education with a trade or journeyman's certificate.

#### *Partial competence qualifications*

Before Reform 94 many pupils did not meet the requirements to get a certificate. They left upper secondary education without documentation of the actual competence they had attained.

In connection with Reform 94 the pupils therefore were granted a statutory right to attain a documented partial competence. This means that pupils may aim at completing only parts of upper secondary education, and get the achieved competence documented at the end of the education. Based on this documentation, the pupils later on may continue their education with the objective of obtaining full university entrance qualifications or vocational competence. By studying and passing examinations in the areas of the education they have not previously completed, the pupils may then get their certificate.

The Ministry of Education, Research and Church Affairs is elaborating the possibility of changing the legislation in order to make it possible to achieve documented partial competence both through education obtained at schools and training obtained in an enterprise.

### 3.1.5 *The reform of content*

The general process of change in society and the recent reforms in the educational system revealed the need for a policy document defining aims, principles and basic values that all education should be based on. A Core Curriculum (1993) was therefore developed for primary, secondary and adult education, including vocational education, in which humanistic, creative and social aspects of education and knowledge are emphasised.

The national curriculum in Norway refers to the written documents given formal status by the Ministry as basic steering documents for the organisation, implementation and assessment at all levels of upper secondary education. The curricula cover both training at school and in a training establishment. As a result of the new curricula, vocational training is based on a common platform with greater elements of theoretical and general subject areas.

The curriculum of upper secondary education consists of:

- a) a core curriculum
- b) subject syllabuses or curricula which state the attainment targets and focal points of all subjects or courses within the different areas of study

A wide concept of knowledge and competence is introduced in the Core Curriculum and the human being and human values are focused. Greater emphasis is now put on developing certain "personal qualities" such as social abilities, communicative skills, creativity and study skills, problem finding and problem solving. Ethical and moral values and attitudes are also emphasised. The Core curriculum describes its educational objectives in terms of seven types of human beings and the seven types add up to "the integrated human being". (See annex, table 1).

The Core curriculum gives guidelines for the development of subject syllabuses. The greatest challenge in producing the new subject syllabuses has been to integrate the core skills into the different syllabuses for each subject or course. The core skills have to be taught and learned in relation to other skills or knowledge, i.e. put into context.

The development of the subject syllabuses is based on the following principles:

- Management by objectives
- The link between the core curriculum and the subject syllabuses is to be apparent.
- A wide concept of knowledge
- The subject syllabuses are applicable regardless of which groups receive the training.
- General education is an integral part of vocational training.
- The syllabuses are divided into modules.

The syllabuses are modularised to meet the needs different groups have for linking parts of their education together in order to gain recognised qualifications.

This is especially important for adults and for those who aim at partial competence. The modularised syllabuses will also meet the needs of labour market training.

### **3.1.6 Capacity and number of pupils**

During the current school year, there are over 178 000 pupils at upper secondary level, including vocational training. About half of the pupils are attending general courses and the other half are attending vocational courses. The number of pupils has decreased since 1992 (see annex II, appendix II, table 2), despite of the fact that young people were given a statutory right to receive a school place. This is mainly due to the small youth cohorts, but also to the fact that many of the county municipalities have not been able to maintain a capacity of 375 per cent of the 3 youth cohorts. The reason for this, they assert, is lack of applications from adults. (See annex II, appendix II, table 3).

The number of apprenticeship contracts has increased from about 19 000 in 1993 to 28 000 in 1996. (See annex II, table 4).

### **3.1.7 Concerns about special aspects of Reform 94**

There are three aspects of the reform that raise special concern when it comes to transition.

The first concern is the structure. The 13 foundation courses lead to more than 100 advanced courses I, while the intention was to keep the number down to 50. The high number of advanced courses I is established through strong pressure from the advisory bodies and different trades and is due to need for a higher degree of specialisation at this level. This may cause a mismatch problem when it comes to matching the pupils' specialisation from advanced course I with the needs of the enterprises.

The second concern is the capacity of the enterprises to supply enough apprenticeship places for the applicants. Even if the enterprises should be able to supply enough places, it is not certain that the vocation in which the pupil is offered an apprenticeship place, matches the pupil's competence.

The third concern is connected to the pupils who do not have a statutory right to three years of education. As they will be last in the queue to receive a place they prioritise, they will either leave school or change their mind about educational pathway, thus their transition within the educational system will be delayed.

### **3.1.8 Other educational institutions and aspects**

To complete the picture of education at upper secondary level, the following must be mentioned:

*Technical schools (See annex II, table 7).*

Skilled workers can build further on their trade or journeyman's certificate by attending a technical school. The technical schools are public schools owned and managed by the counties. The main purpose of the technical schools is to provide education for persons having a relevant trade or journeyman's certificate and a minimum of two years' background in a specific trade covered by the Act concerning Vocational Training.

Successful completion of studies at a technical school confers the status of technician. Having completed technical school, the technician can be admitted to higher education institutions in areas which offer further specialisation in the same field, for example in engineering. The position of the technical schools is currently under review. New admission requirements and curricula will come into force in autumn 1999.

### *Resource centres in upper secondary schools:*

One out of every two upper secondary schools participate actively in some kind of resource centre activity in addition to their regular education and training activities. The centres promote, market and provide training measures to private and public institutions on a commercial basis. Often, the centres are organised as separate departments within upper secondary schools, but they can also be organised as foundations or as individual limited companies.

The main tasks of these centres is to stimulate the co-operation between upper secondary schools and the local labour market and industry to contribute to the enhancement of competence both in working life and in schools. The centres also contribute in the task of finding new areas and forms of co-operation - between schools, institutions, public and private enterprises responsible for general education, vocational training and adult education and the local industry - that will lead to more adapted educational and training opportunities for young people and adults and create more jobs in the local community. Examples of such training tasks are courses in foreign languages for enterprises, the certification of welders for the oil industry, computer training and the placement of teachers in enterprises. Their efforts are designed to contribute to better use of the schools' professional and pedagogical resources and to strengthen the schools' knowledge of industry. Many of the centres have tasks from the employment authorities as their main activity.

### *Folk high schools*

In 1997, there are 79 folk high schools in Norway with a combined capacity of 7 000 pupils. Most of these schools are boarding schools owned and run by religious organisations and other independent foundations. They provide general education courses and a variety of other courses for young people and adults. The courses do not result in formal qualifications, however from the school year 1997/98, pupils receive 3 competition points upon applying for higher education. This measure has encouraged young people to apply folk high schools.

Most of the pupils who apply to these schools, do so because they wish to have a year in which to plan and think ahead, either during or after completing upper secondary education. (See annex II, figure 3).

### *The military as a training institution for working life:*

Norway has a compulsory military service for men ranging from 12 months for the Army to 15 months for the Navy and Air Force. 67 per cent of each age cohort complete military service. Instead of military service one may take 15 months' community service work. Upon completion of military service the soldiers get one competition point for admission to higher education. Women may also serve in the armed forces on a voluntary basis.

The transition period is affected by the military service.

Since 1995, the military has been a significant vocational training institution offering about 50 vocational courses e.g. cookery, auto repair, automation mechanics, service electronics and avionics. Per 1997, there are about 600 apprentices who have signed an apprenticeship contract with the armed forces. Next year the number of apprentices is expected to increase further by 100 for the Army alone. Most apprentices are 18 years old. The armed forces also run higher education institutions for the training of officers and other military staff.

### *Adult study associations*

Approximately one quarter of the adult population participates every year in organised education and training. This mainly consists of in-service training in enterprises or courses arranged by study associations. The latter accounts for around 40 per cent of the total number of participants. In addition, comprehensive, informal training takes place at the workplace – an activity which is considered important in the development of the individual employee's own skills. The study associations are a joint body for voluntary, humanitarian, political and other non-government organisations. Examples are the Folk University (Folkeuniversitet) and the Workers Educational Association in Norway (AOF). (See annex II, appendix II, table 3).

- 770 000 adults participate annually in various courses arranged by the adult study associations
- 14 000 participate in courses at upper secondary level
- 33 000 adults participate in courses at college or university level

### *External examinations*

Section 20 of the Act concerning Vocational Training allows adults who wish to obtain a trade certificate to obtain formal recognition of professional knowledge and skills acquired over time in the context of a job. The section 20 measure is not a training measure but a documentation measure. Candidates do not need to go through a formal education and training process, but must have relevant professional experience that has lasted at least 25 per cent longer than the apprenticeship period for the trade, that is to say, normally 5 years. They must take the same practical trade examination as the one taken by the apprentices and in addition pass an examination in the theory of the trade. The number of trade and journeyman's certificates obtained for section 20 candidates account for about 40 per cent of all the obtained trade or journeyman's certificates each year. (See annex II, table 3).

It is also possible to take external examinations in all subjects in upper secondary education. This gives adults the opportunity to document their competence without having to attend a course. However, a wide range of courses are offered by private institutions for adults who want to have some schooling before they take the external examination. The majority of those who take external examinations do so because they have failed certain courses at school or because they want to improve their marks, and thereby their competition points for admission to higher education.

For higher education, there is a similar provision (Act no. 22 of 12 May 1995 on Universities and Colleges, Article 40 no. 1) which regulates the rights for all citizens, whether registered students or not, to have their qualifications and knowledge assessed: "Whoever satisfies the general, and, as the case may be, special admission requirements, as well as other requirements for taking the examination in a given discipline or course of study, is entitled to take the examination. This also applies to students who have not been admitted to the discipline or course of study".

In the autumn of 1995, there were 5 186 individuals who presented themselves for examinations without being admitted as students, mostly at the universities, and in 1996, the number was reduced to 4 445.

### *Vocational and educational guidance*

The Ministry of Education, Research and Church Affairs and the Storting have in connection with the educational reforms underlined the importance of a good vocational and educational guidance, both in primary and lower secondary education and in upper secondary education.

Most primary schools have programmes for introducing pupils to working life for example by inviting representatives from local industry or the community to the schools or by taking the pupils to visit local industries and community services. This is often the young pupils' first introduction to working life.

Guidance and information about the world of work form part of the curriculum, providing one week training placement during the 8th grade. Each institution has a counsellor, who provides information and individual advice regarding upper secondary education and employment possibilities. In addition, many schools at the lower secondary level (stage 8-10) have placement programmes called PRYO for placing pupils for a period of up to two weeks in work-places.

A book is distributed free of charge to all pupils in the 10th grade with information on all the study-programmes from which they can choose in upper secondary education and with short summaries of the content of these study-programmes (Pedlex).

Regional plans of action have been developed and put into use at lower and upper secondary schools in order to develop competence within the field of vocational and educational guidance. The purpose of these plans of action has been to create coherence between the young people's choice of education and the availability of apprenticeships and jobs. Among the results so far, we see better co-ordination and more effective co-operation between the different bodies that are responsible for providing vocational guidance.

### *Pupil enterprises*

The ability to innovate and to adapt are qualifications which are in great demand in the public as well as in the private sector. A central feature of the industrial development in Norway is that small firms constitute an important part of all new establishments. Human resources are in other words important. Schools and education can also contribute by placing emphasis on employer creativity rather than on being employed.

Pupil enterprises is an important means of developing positive attitudes towards the use of knowledge in an overall and creative way. Through the planning, establishment and running of the enterprise, the pupils are given challenging and demanding tasks which stimulate fantasy and sense of initiative and venture<sup>9</sup>.

There are two models/projects in Norway for the organisation of pupil enterprises:

- 1) Community active schools (Distriktsaktiv skole)
- 2) Young Enterprise

The project "Community active schools" has its roots in Norway and has a great impact, especially at the lower secondary level. Young Enterprise is linked to an international organisation, Young Enterprise Europe, and is aimed especially towards the upper secondary level.

## **3.2 Higher education**

In developing the Norwegian system of higher education, a main concern has been to design a system which is comprehensive and diverse, meaning that our approach has been, and is, coloured by concerns for equality, for social and geographical considerations, and for overall measures. An important aim has been

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<sup>9</sup> The social science syllabus which is compulsory for all pupils in upper secondary education gives a basic introduction on which steps to take in working towards establishing an enterprise.

to design a system with a great variety of supply both in terms of type and length of study programmes, with no dead ends, thus facilitating mobility between institutions and types of study for the individual student.

The considerable expansion of higher education in the 1960s and 1970s, the policy of upgrading institutions and the establishment of new kinds of colleges, with new types of study programmes in new subjects areas as well as multi-disciplinary programmes, resulted in a vast number of higher education institutions. At the most there were 144 state plus 20-odd private ones, of which only 17 (including the 4 universities) had more than 1 000 students each.

Towards the end of the 1980s, it was therefore decided to review various aspects of higher education. The present policy in higher education may be referred back to a 1988 Royal Commission Report (green paper) on higher education and an ensuing 1991 white paper, suggesting that higher education institutions be reorganised and merged. In addition the term 'Network Norway' was coined, to denote a national higher education and research network based on the principles of specialisation, co-operation and communication.

A governing principle of the network is that new study programmes should be considered in relation to an overall national plan.

Until the early nineties, the non-university higher education institutions were subject to quite detailed state regulations. In order for more discretionary power of decision-making to be delegated to these institutions, it was considered necessary to obtain larger and more comprehensive institutions through reorganisation and merging processes. Consequently, on 1 August 1994, 98 former regional and vocational colleges were reorganised and merged to form 26 larger state colleges, and on 1 August 1996, seven colleges and academies of arts, crafts and design were merged into two new institutions, one in Oslo and one in Bergen. In addition, a few minor mergers have taken place.

A new law for all state higher education institutions, Act no. 22 of 12 May 1995 on Universities and Colleges, became applicable as of 1 January 1996. This law gives the institutions of higher education a considerable degree of academic and administrative autonomy, while leaving decisions on overall organisation to the Ministry. The Act also formally established and secured 'Network Norway'.

The policy of encouraging equal opportunities in the access to higher education, irrespective of social, economic and/or geographical background is reflected in the legislation concerning loans and grants to students. The State Educational Loan Fund was established in 1947 to give financial assistance to students, and thereby facilitate the access to higher education for young people from all walks of life. Loans and grants are awarded following Regulations that are valid for the academic year in question, since 1985-86 in accordance with Act no. 21 of 26 April 1985 on financial support to pupils and students, with subsequent amendments.

The organisation of student welfare (i.e. student housing, canteens, kindergartens, medical services, sports facilities and the like) is also of great importance for the recruitment to higher education, and the latest legislation in this field is Act of 28 June 1996 no. 54. Although tuition at public higher education institutions in Norway is free, the institutions may ask a small fee for the running of student welfare activities.

### 3.2.1 Admission to Higher Education

#### a) Admission requirements

For access to higher education, a general matriculation standard has been introduced, setting minimum requirements which include the following components:

- Successful completion of three years of upper secondary education including foundation course, advanced course I and advanced course II (regardless of area of study), or a recognised vocational qualification/trade certificate.
- 6 core subjects, which either are included in, or come in addition to, the above-mentioned criteria. These are general subjects from upper secondary school, and the required level of attainment is determined in periods (or lessons) per week: Norwegian (14); English (5); History - post 1850 (4) and Social Studies (2); Mathematics (5); Natural Science (5). (See annex II, figure 2).

Applicants can be admitted to higher education without having passed the normal upper secondary final examination. Such students must, however, fulfil the specific minimum subject requirements mentioned above, be 23 years old or more, and have at least five years of work experience, or of a combination of work experience, education and training.

For some studies, like for instance medicine, engineering and translation, applicants also need additional qualifications from upper secondary school - in mathematics and natural sciences for the former, and in languages for the latter.

#### b) Admission capacity

Admission to many areas of study in higher education is competitive, since demand exceeds the number of places available. Provisions regarding «Numerus Clausus» for specific study programmes or faculties are open to revision on a yearly basis, and are decided by the Storting (national assembly) for the universities, and by the Government for the colleges.

However, it is seen as an objective by Government and Storting alike, that the universities and colleges teaching subjects for the lower degree in the humanities, in natural sciences and in social sciences, should be open to all qualified applicants on a national basis in these subjects.

This system is called '*national access*' and was introduced with effect from the academic year 1995/96. From then on, all qualified applicants would be accepted at the kind of faculty they applied to, but not necessarily at the university of their first choice, in order both to ensure access for all, and to avoid too much pressure on the most popular institutions. Since last year (1996/97), the system also applies to the state colleges teaching such subjects.

The main political aims of the 1990s concerning the admission capacity to tertiary education are defined in Proposition to the Storting (national assembly) no. 67 (1995/96) of 10 May 1996 on the admission to the universities in the academic year 1996/97, as follows:

- to admit the largest possible number of qualified applicants (i.e. applicants that satisfy the minimum admission requirements), in accordance with individual wishes and the country's need for a highly educated work force, and

- to ensure the quality of study programmes and learning environments, and
- to enable a larger proportion of students to complete their studies within the prescribed time limits.

As will have appeared, it is of no primary concern to match the number of graduates with the needs of the labour market directly, although consideration is made to this aspect as well, particularly for some of the professional study programmes.

In fields like education, health and social services, the employment market is very much a result of political decisions. Hence, due to the ongoing reforms of the school system and to insufficient recruitment to the health and social services sector, the priorities in 1995 and 1996 were given to increasing the capacity of provision in pre-school and general teacher education, as well as in medicine and study programmes for paramedical professions, like for instance nursing. It is extremely difficult to foresee exactly the pace of changes in demand for the various professional groups, and thus to match supply and demand, so our planning has not been entirely successful.

### *c) Entrance delay - «backwater»*

Many Norwegian students do not go to universities or colleges directly after leaving upper secondary school. As a consequence, the Norwegian student population is relatively old: in 1996, 25.2 per cent of the applicants to higher education were over 24 years old, whereas the percentage for 1995 was 27. (See annex III, figure 2). There are several explanations to this: partly it derives from personal preferences like the wish to gain working experience.

The admission requirements for higher education studies practising "numerus clausus" have also contributed. A few years ago, the most popular studies, like medicine and physiotherapy, demanded so many points, that school leavers could hardly compete. The admission requirements are defined by points with a heavy weight on good marks from upper secondary school. In addition, pupils can achieve points for choosing special subjects in upper secondary education. Points can also be obtained for several activities like higher education exams, military service, working experience or simply for age counting from 19 to 23 years. This serves as a means to counterbalance mere school marks, but to some extent also causes a backwater effect. It should also be noted that applicants have the opportunity to improve exams in each subject from upper secondary school. This opportunity gives them a second chance, but it has an inflationary effect on the admission requirements.

In recent years, these two effects have been counteracted in college education by a quota reserved for applicants between the ages of 19 and 21, and as for medicine and veterinary medicine by a quota for applicants with original school diplomas, i.e. with no improved exams.

In June 1997, the Storting approved a white paper on the ranking of applicants. It was decided that from the year 2000, a quota of 30 - 40 per cent will be introduced for all studies based on original school diplomas and with no points for other activities. Furthermore, there will be no opportunity to improve exams on lower levels when having taken a superior course in upper secondary school. The intention is to reduce backwater effects, but still retain the opportunity to improve exams and to gain additional points after leaving upper secondary school for the majority of the applicants.

### 3.2.2 *Number of students*

Today, there is an estimated total of 173 000 students in higher education, which corresponds to an increase in total student population of 70 per cent over the past 7 years. (See annex III, tables 1-7)

There are:

81 600 in the university sector (74 400 at the universities and 7 200 at the university colleges)

68 800 in the non-university sector

13 600 in private institutions.

9 000 abroad

Norway's present overall capacity in tertiary education corresponds to that which is necessary for roughly 50 per cent of each year cohort for 6 years, and the policy at the moment is that of moving towards a consolidation at approximately the present level, so that increases in admission to some study programmes at least to a certain extent should be compensated by reductions in others. In our view, we have developed a sufficient overall capacity in tertiary education, although adjustments of course will be necessary to regulate the prevailing mismatch between demand and provision for a number of vocational programmes.

After reaching a (preliminary?) peak in the number of applicants to tertiary education in 1994, of 109 054 (of which 97 116 qualified), there was a tendency towards a stabilisation at a somewhat lower level, of 101 255 applicants (83 884 qualified) in 1995, and 101 288 (82 294 qualified) in 1996. In 1997, the number of applicants to higher education dropped significantly, to 90 002 (72 445 qualified)<sup>10</sup>. At the same time, total capacity has increased, thus reducing the number of qualified applicants without any offer of admission from 25 514 (1994) to 14 841 (1995), 12,433 (1996) and 6 450 (1997) in the same period.

### 3.2.3 *Through-flow of students in higher education*

It is a recognised problem for the overall productivity of the system of higher education that a lot of the students, particularly at the "open" studies at the universities (the humanities, social sciences, natural sciences and law), spend more than the prescribed time before completion of their studies. This is partly due to students taking up paid work in addition to their studies, but it could also be due to organisational features at the universities or the size of the student population.

The Ministry of Education, Research and Church Affairs lacks in-depth and systematic knowledge concerning this phenomenon, and has therefore asked the Norwegian Institute for studies in Research and Higher Education (NIFU) to observe the situation through a special programme on recruitment and the progression of students through higher education compared to prescribed study periods ("through-flow"). In a report on growth and production of graduates in higher education, NIFU<sup>11</sup> found that students overall progressed 4 per cent more slowly in the period between 1 October 1992 and 1 October 1993 (92/93 hereafter) than in the period 1 October 1987 to 1 October 1988 (87/88 hereafter). Moreover, students that graduated with a higher or professional degree in 92/93, had spent somewhat more time before completion of their studies than their counterparts graduating in 87/88. In 87/88, the 3 943 graduates that following

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<sup>10</sup> Preliminary numbers by 10 August 1997.

<sup>11</sup> Tore Neses: Utdanningsvekst og kandidatproduksjon, NIFU, U-notat 4/96.

prescribed study periods should have completed in an average of 5.41 years, did so in 6.59 years, whereas the 5 600 graduates that should have completed within an average of 5.35 years in 92/93, only did so in 6.66 years. If the 92/93 graduates had followed the same rate of progression as their 87/88 counterpart, they would have finished in 6.52 years on average and saved 775 student years or 120 student places per year. According to the report, parts of this difference might be attributed to problems related to the expansion in the number of students in higher education, which really started “taking off” at the end of the 1980s. (The number of students increased by 63 per cent in the university sector and by 49 per cent in the non-university sector in the period 1988 to 1993.)

A table indicating variations in the relationship between prescribed and real study periods required is enclosed in Annex III, table 8.

In order to encourage better “productivity”, some result oriented allocations have been introduced in the state funding of the higher education institutions. Since 1995, the universities thus compete for their respective share of a reserved lump sum - 150 million NOK in 1995, 200 million NOK in 1996, and 250 million NOK in 1997 - allocated on the basis of the average (study unit) credits obtained by the students at each of the universities. The intention is to provide a stimulus for the institutions to encourage more of their students to complete their studies within the prescribed time limits. Special funds are also allocated to the universities on the basis of the number of students having obtained higher university degrees (i.e. completed study programmes of between 5 and 7 years' duration), as well as of the number of obtained doctor's degrees. In 1997, the universities receive NOK 10 000 per graduate in a higher degree, as well as NOK 20 000 for each male, and NOK 30 000 for each female graduating with a doctor's degree.

#### **3.2.4 *The OECD report on the first years of tertiary education***

The team reviewing the first years of tertiary education (April, 1997), visited Norway in October 1995.

The review team assessing Norway in the ten country thematic review made several remarks and recommendations. At the level of the individual course, programme or institution much satisfaction is expressed. Standards of provision are generally high, the regional institutions often have a close relationship with the community and employers, teachers and students interact often in small groups.

On the other hand, a number of problems are identified:

- the queuing problem, described in this report as part of the backwater problems,
- a lack of close relations between tertiary education and demands of the labour market,
- our universities' emphasis on exams rather than teaching,
- that the evaluation of the students' education is not systematic enough,
- the concept of “Network Norway” should be given more substance, e.g. to achieve institutional specialisation and as a way of rationalising resources, and
- we could be more open-minded towards new ways of “user pays”.

### **3.3 *Labour market policy***

#### **3.3.1 *The Public Employment Service***

The labour market policy is implemented by the Public Employment Service (PES). The PES offer a range of services to young job-seekers. The strategy towards job-seekers is first and foremost to provide

information about the labour market and education, secondly placement assistance, and if deemed necessary, to provide assistance so that individual job-seekers may improve qualifications through participation in labour market programmes. The PES prioritises targeted efforts towards groups that have particular difficulties on the labour market. These groups are mainly young people and the long-term unemployed.

Normally, unemployed persons will be allocated places in a programme only after active job-seeking has been tried for some time. However, measures must be set up sufficiently early, in order to prevent long-term unemployment. Very often vocational courses of short duration are sufficient to obtain an ordinary job.

The PES is given the responsibility to provide assistance to young people below the age of 20 who do not wish to exercise their *statutory* right to an upper secondary education. The PES offers a range of services to young people, including placement, information about the labour market and education, as well as job-counselling. Counselling shall as far as possible aim at motivating young people to seek further education. The PES co-operates with the county follow-up service in their efforts for young people who do not wish to exercise their right to an education. Young people below the age of 20 without either a place in an educational institution or work shall be offered participation in a trainee place scheme or a combination of a trainee place scheme and ordinary upper secondary education.

To prevent long-term unemployment and passiveness among persons aged 20-24, this group of unemployed has been prioritised with regard to labour market programmes since the second half of 1995. All those who have been unemployed, without a place in school, or in a labour market programme for the last six months, will be offered a place in a programme. In order to follow up the unemployed in this age group more systematically, individual plans of action will be set up, which provide for a more structured co-operation between the unemployed and the Employment Office.

The Norwegian unemployment benefit system is based on previous earned income to secure job-seekers against loss of income due to unemployment. From the first of January 1997 the unemployment benefit system has been revised. The income requirement was raised to 1,25 G (which is the equivalent to 53 125 NOK per June 1997). Maximum benefit period for income between 1,25-2 G is 1,5 years and for incomes above 2 G it is three years. It is an absolute requirement that all benefit recipients are job-seekers. As a main rule they must take any job that is offered them by the Public Employment Service, even if this means that they have to change their place of residence. Also work at lower wages than in previous jobs must be accepted. A person who without valid reason, refuses to take a job offered him or her, or who refuses to participate in a labour market scheme, will lose the right to unemployment benefits for 8 weeks.

Participants in Labour market training courses (LMT) and trainee place schemes will receive unemployment benefit, if they are entitled to it, or a grant of NOK 152 or 203 a day (per 1997) from the Labour Market Service. In addition, allowance for dependants and travel costs can be given.

Continued growth in employment and decline in unemployment is expected in 1997 and 1998. The PES will pay more attention to the fact that their most important function is to match job-seekers with vacant jobs. Activation of job-seekers through information and follow-up, will be emphasised.

### **3.3.2 Information and placement**

With the present strong labour market in Norway, information, counselling and placement from the Public Employment Service (PES) are important tools to reduce unemployment even more.

The PES collects, organises and disseminates information about job seekers, employers, vacant jobs and about education. Altogether these records contain the essential elements of the information the employment offices need in order to plan and implement labour market policies.

The information system on vacant jobs and school places is designed to facilitate self-service for job seekers. Thus a majority of those looking for jobs or a school place can help themselves and resources are liberated for those who need follow-up. Unemployed persons are offered measures according to their individual needs. This follow-up from the employment office may be manifested through an individual plan of action. However, this is very work intensive and is not offered all job-seekers.

The plans of action include an obligation from job-seeker to take responsibility for his/her own situation, and contribute to clarifying and improving service of the PES towards the individual job-seekers.

The PES offers guidance in the choice of vocation and training for individuals looking for work. A computerised vocational guidance system has been developed for this purpose.

Most employers contact employment offices for assistance in connection with recruitment, but employment offices themselves also actively take contact with employers to offer them a placement service for job seekers who are registered at the PES.

To handle placements to and from countries covered by the EEA agreement a unit within the PES, EUROPA-service (Service Europe), has been established.

### **3.3.3 Evaluations of schemes for transition from unemployment to employment and education**

The most common schemes for young unemployed are Trainee Places and Labour Market Training Courses (LMT). Other labour market schemes, e.g. Wage Subsidies and Training Substitution, are also utilised towards young unemployed. The Ministry of Local Government and Labour has during the last years initiated several evaluations of labour market programmes such as the LMT Courses and Trainee Places.

Trainee places are one of the most common schemes for newcomers on the labour market. Youth and immigrants are the main participants. The participants receive practical work training in private enterprises or with public employers. The training can also be arranged in combination with upper secondary school. Trainee place schemes normally last 26 weeks. Apart from job training, it is also an aim to encourage participants to take on more education.

The scheme has been evaluated<sup>12</sup> for participants in the age group 20-24 years on the basis of data from 1994 and 1995. The results of this evaluation show positive effects for the participants, both regarding job opportunities and transition to education.

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<sup>12</sup> Eldring, L. and Grøgaard, J.B. (1996), *Evaluering av Næringslivets fadderordning og praksisplasstiltaket*, Forskningsstiftelsen FAFO, Oslo.

The purpose of Labour market training programmes is to qualify job-seekers for ordinary work, while at the same time meeting the employer's demand for various types of labour. It may also encourage participants to enter further education. The target group is unemployed above 19 years. LMTs also have an important task in removing «skill bottlenecks» in the labour market.

Statistics Norway<sup>13</sup> (1997) undertook an evaluation of different labour market schemes, including trainee places and LMT courses, on the basis of registerdata from 1996. Effects on job opportunities, not education, are studied in this evaluation. The evaluation shows that participants in ordinary labour market schemes in the age group 20-29 years have better chances getting a job after completing the scheme than older age groups.

An evaluation of the LMT programmes conducted by the Directorate of Labour<sup>14</sup> confirms that these courses had effects both with regard to job opportunities and also with regard to further education. This evaluation also shows that the probability of acquiring a job or starting an education after the course decreases with age. Course participants below the age of 25 have 11 per cent higher chance of starting a job or education than participants in the age group 30-49 years. The evaluation also shows that the probability of acquiring a job after the course increases with the number of years of education, previous job experience and the length of time one has looked for a job.

Another evaluation of the LMT programmes conducted by SNF<sup>15</sup> shows that these courses are important instruments when it comes to qualifying unemployed for ordinary work. Applicants to LMT programmes who were offered training in the autumn 1989, had higher annual earnings both in 1993 and 1994 compared with applicants who were rejected because of scarce capacity. Annual earnings reflect both how fast participants on LMT courses got ordinary employment and the ordinary employment period up to participation in a course. Vocational courses are found to raise annual earnings after two to three years and more than for other LMT courses. The effect on earnings is higher for applicants with low education and long work experience compared to applicants with higher education and a shorter unemployment period.

### **3.4 Concerns about the labour market**

#### **3.4.1 *An analyses of young people - from education to work***

In a recent study from the Foundation for Research in Economics and Business Administration (SNF)<sup>16</sup>, all young people who finished their education in 1988-89 were followed into the 1990s in order to analyse the transition from school to work. In the autumn of 1991, two years after they had left school, approximately half of them had found permanent jobs, while 20 per cent had a fluctuating job-situation. About 15 per cent were not in the labour force, while 13 per cent were unemployed. This study shows that it may take a long time for some to establish themselves in the labour market. Education is one of the most important factors influencing such establishment. Those with a long education have overall fewer problems finding

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<sup>13</sup> Lund, M., Landfald, Ø. and Try, S. (1997), *Registerbasert evaluering av ordinære arbeidsmarkedstiltak*, SSB.

<sup>14</sup> Arbeidsdirektoratet, *Evaluering av AMO-kurs 1994. Del 2. Etterundersøkelse av AMO-deltakere*, Rapport 1996:3.

<sup>15</sup> Raaum, O. and Torp, H. (1997), *Labour Market Training in Norway - Effect on Earnings*, The Foundation for Research in Economics and Business Administration (SNF), Oslo.

<sup>16</sup> Brinch, C. (1995), *Fra skole til jobb - en analyse av norske registerdata*, SNF, Oslo.

jobs, while those below 20, and those who do not go through at least two years of upper secondary education, are less successful with the transition from school to work.

A study of the educational progress of 16-year-olds was conducted in the period 1988 up until the school year 1990/91. The study showed that of the 95 per cent of the 16-year-olds who in 1988 applied for a foundation course in upper secondary education, 84 per cent were admitted as pupils and 0.3 per cent entered into an apprenticeship contract. 5 per cent of those who started on a foundation course became drop-outs.

More than 50 per cent of these became unemployed. 20 per cent of the age cohort did not attend upper secondary education after one year (2nd school year), while there were 23 per cent after two years (3rd school year). In the course of three years of education 39 per cent obtained general entrance qualifications for university or university college studies, while 4 per cent had obtained a trade or journeyman's certificate<sup>17</sup>.

### **3.4.2 Transition to the labour market for young people**

Normally, young people have more problems in a difficult labour market than other age groups. On the other hand, young people have more alternative activities than other age groups. Education, for instance, is a very common alternative to employment for young people.

Most young people in the age group 16-19 years attend school or have education as their main activity according to the Norwegian Labour Force Survey (See annex I, table 3). These figures will vary from those in annex I, table 1, because they are related to main activity and not labour force status. In the first half of 1997, 85 per cent in this age group attended school or had education as their main activity. 8 per cent were employed (employed includes full-time work and part-time workers who consider the employment as their main activity) and 7 per cent were grouped under other activities or unspecified. In the age group 20-24 years, education is more unusual.

In the first half of 1997, 34 per cent had education as their main activity, 50 per cent were employed, 3 per cent of these were working at home and 13 per cent were grouped under other activities/unspecified. According to the figures in annex I, table 3 the distribution in activity has been relatively stable since 1992 for both age groups.

Young persons without work experience, or without recognised education have, in a difficult labour market situation, more problems finding work than most other age groups. Unemployment is particularly high in the age group 20-24. In the first half of 1997, there were on average 13 100 registered unemployed between 20-24 years, i.e. 6.0 per cent of the labour force in the age group. For those below 20 years of age there was an average of 2 800 registered unemployed or 3.1 per cent of the labour force. For the adult population (25 years and older) the registered unemployment was 4.3 per cent. The high unemployment rate among young people can partly be ascribed to the fact that only 59.3 per cent of the age group 16-24 years was in the labour force in 1996, while 81.9 per cent of the age group 25-66 years was in the labour force in the same year.

The overrepresentation of young people among the unemployed is caused by several factors. Young people are sometimes considered less attractive by employers because they lack experience, they are on their way into the labour market, i.e. in transition from school to work. Young people also change jobs

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<sup>17</sup> NOU 1991:4, page 28-30.

more often than others, and frequent transitions between work and education are common. Further, a high proportion is in the educational system, which means that full-time workers - and persons seeking full-time work - in this group to some extent consists of persons with low education. When it comes to high initial wages, an expert-group<sup>18</sup> concluded that this does not seem to be a general problem in Norway. But the wage structure may in some sectors be an obstacle to employment of youths without experience or fulfilled education. These factors together, may explain why it takes time to find a good adjustment to working life.

Unemployment among young people is more sensitive towards fluctuations in the economy than unemployment among adults, and the general economic improvement in Norway the last years has caused a considerable decline in unemployment among young people. (See annex I, figure 1). The relatively strong decline in youth unemployment can also be ascribed to a reduction in the year cohorts entering the labour market, and more places in upper secondary education, as well as a priority for young people in labour market schemes. The number of registered unemployed in the age group 20-24 years was reduced by 23 per cent from the first half of 1996 until first half of 1997. During the same period the number of registered unemployed fell by 14 per cent for people aged 25 and older.

Most of the young unemployed are unemployed for a short period. The relative proportion of registered long term unemployed (unemployed for more than 26 weeks) is considerably lower than that of most other age groups. (See annex I, table 4). The differences recorded between the age groups might be due to the high priority given to young unemployed below 25 years in labour market programmes. This priority implies that young unemployed are given an offer of a labour market scheme quite early in their unemployment period.

Another factor that influences long-term unemployment is that the unemployment benefit system requires regular registration at the Employment Office. This implies that unemployed who are not entitled to unemployment benefit more often will have breaks in their unemployment periods.

Another important factor is that employers, in some contexts, find younger persons more attractive as employees.

SNF has conducted a study<sup>19</sup> of the different pathways of all persons who were registered as unemployed in October 1990. The study gives information about the transfers between unemployment, labour market schemes, work, education and different types of social security benefits in the period October 1990 to December 1992. The results show that the share which started a job in the period October 1990 to December 1992 was highest among the age group 20-24 years. The employment rate is falling with older age groups. In the age group 16-19 years very few started working, but relatively many started an education during the period.

In another study<sup>20</sup> by SNF the population aged 16-69 years was divided in 6 different categories, based on their connection to the labour market during the period 1989-1992. The categories vary from strong connection to the labour market (i.e. in job or education for more than 3 years) to no connection to the labour market (i.e. no job, education and not registered unemployed during the four years). In the last

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<sup>18</sup> NOU 1994:3, *Ungdom, lønn og arbeidsledighet*.

<sup>19</sup> Hernæs, E. og Strøm, S., *Fra ledighet til jobb*, Centre for Research in Economics and Business Administration (SNF), Arbeidsnotat nr. 28/1994.

<sup>20</sup> Hernæs, E. og Sollie, M., *Befolkningens arbeidsmarkedstilknytning, 1989-92*, Centre for Research in Economics and Business Administration (SNF), SNF-rapport2/97.

group one will find housewives and people in the social security system. A category with a marginal connection to the labour market consists of people which have been registered unemployed some time during the four-year-period. They have tried to get a job without any success. 4.2 per cent of the population was in that group. Young people (16-24 years) are overrepresented in this category (7-9 per cent). This indicates that young people have small opportunities on the labour market in an economic downturn.

In a situation with very few jobs many young people do not get into the labour market because of lack of experience. On the other hand, figures from the Directorate of Labour show that very few young people are long-term unemployed. This must be seen as a result of the high priority of this group in the labour market policy.

Temporary employment is partly related to general job creation through the need enterprises have for flexibility, for example adjusting the number of employees to the demand for products. On the other hand, a temporary job implies a great portion of insecurity for many employees. A recent Norwegian study on temporary employment arrangements<sup>21</sup> shows that around 14 per cent of employees have temporary jobs. The study shows that nearly half of those who are temporary employed are less than 30 years old. It seems that a temporary job is the spring-board to a permanent position for many young people.

### **3.4.3 Young immigrants in the labour market**

Job participation among immigrants is generally lower than for persons born in Norway. For the whole population in the age group 16-25, about 42 per cent are employed (4th quarter 1996). Among first generation immigrants in the same age group about 28 per cent are employed. There are, however, considerable differences between the various immigrant groups.

Registered unemployment among first generation immigrants fell from 11.6 per cent in November 1996 to 10.6 per cent in November 1997. In the same period, the unemployment rate for first generation immigrants in the age group 16-24 years fell from 14.4 per cent to 12.4 per cent. For this age group the unemployment rate declined for all national groups.

Obstacles to the labour market integration for immigrants can be lack of knowledge of the Norwegian language and working life, and in some cases ethnic discrimination may also occur. Furthermore, there are some problems regarding documentation of educational certificates from the country of origin, as well as the recognition of diplomas and certificates. However, several problems are due to the short period of time they have spent in Norway. The proportion of immigrants who are employed increases with the number of years lived in Norway.

A longitudinal study<sup>22</sup> of those leaving primary school in 1989, shows that both among first and second generation immigrants the percentage which continued to secondary education is clearly lower than for youths with Norwegian background. Among those who completed secondary education, both first and second generation immigrants had lower income and higher unemployment than persons with Norwegian background. A similar study after the introduction of the reform for secondary education ("Reform 94") does not exist yet.

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<sup>21</sup> Nergaard, K. og Stokke, T. A. (1996), *Midlertidige ansettelser i norsk arbeidsliv. Hvor mange, hvor og hvorfor?*, FAFO, Oslo.

<sup>22</sup>Hamre, J.I. and Raaum, O. (1997), *Innvandrerungdom i og ut av videregående opplæring*, SNF, Oslo.

A recent evaluation<sup>23</sup> of the effect of labour market programmes for unemployed immigrants, indicate that participants in the programmes Wage Subsidies, Labour Market Training Courses and Trainee Places with sponsors improve their job-chances and length of later employment compared to unemployed immigrants not participating in labour market programmes.

#### **3.4.4 Transition to the labour market for young people by level of educational attainment**

As in other OECD countries the unemployment rate is lowest for those with tertiary education and highest for those not having completed upper secondary education. For the age group 20-24 years the unemployment rate in 1995 was 7 per cent among those with university tertiary education and 18.3 per cent among those with below upper secondary education. For the age group 25-29 years, we find a similar pattern. (See annex I, table 5).

The unemployment rates for persons with higher education remained low even during the recession in the early 1990s. It has not fallen much since then, however, due to excess supply of labour in a number of professions.

On the other extreme, the unemployment rate among those with only primary education (or less) increased strongly during the recession and has broadly stayed at that level since. By contrast, the unemployment rate for persons with upper-secondary education, although also hit by the recession, dropped significantly from a 6.4 per cent peak in 1992 to 5.1 per cent in 1995, reflecting a substantial recovery in employment. Conversely, a similar fall in the unemployment rate for young people who have completed lower-secondary education has been due to a decline in participation rate. (See annex I, table 6).

There is a tendency that candidates from tertiary education to a larger degree take work they are overqualified for and that many groups with higher education get a reduced relative pay. The projected increase in the excess supply of persons with tertiary education may result in reinforcement of this tendency.

Annex I, table 7 gives information about labour force status in November 1994 for persons aged 16-29 years that completed an education in May or June 1994. The figures give information about the transfer from fulfilled education to employment, unemployment or participation in labour market schemes, ordinary education, combining education and full-time or part-time employment. Most of those (42.0 per cent) who completed upper secondary school are in education half a year later. Only 15.6 per cent of this education group are in employment by the time of November. In addition, 4.0 per cent were combining education and full time work at the same time. It should, however, be noted that the figures are from a period before Reform 94 was fully implemented. One of the objectives of Reform 94 is to improve the vocational training in order to strengthen the link between school and business and industry. This may lead to an increase in the number of pupils who transfers to the labour market.

When it comes to those who completed a tertiary education of 4 ½ years and more, transfers to employment are of course more common. About 53 per cent of this group are employed half a year after they completed their education, and 10 per cent combine education and full-time employment. For those having completed a tertiary education of 1-4 years duration the share of employed is clearly lower than among those with longer tertiary education (and higher than for those from upper secondary education).

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<sup>23</sup> Schøne, P. (1996), *Innvandrere på arbeidsmarkedet. Evaluering av arbeidsmarkedstiltak*, ISF, Oslo.

## CHAPTER 4: CHANGING EXPECTATIONS AND OBJECTIVES

### 4.1 Participants in policy formation process

#### 4.1.1 *Tripartite co-operation*

The social partners have traditionally had large influence on vocational training in Norway - especially in apprenticeship measures, through branch organisations on both the employees' and employers' sides. Norway has thus a long tradition of close co-operation, both formal and informal, between the education, training and labour market authorities and the social partners.

The Confederation of Trade Unions (LO) and the Confederation of Norwegian Business and Industry (NHO) and also the Norwegian Association of Local and Regional Authorities (Kommunenes Sentralforbund, KS, which is the employers' organisation for the counties and municipalities) have had a formal dialogue with the authorities through the Council for Vocational Training (RFA) and the training councils (OR) and also direct contact and co-operation with the Ministries on a range of issues. The social partners were, for example, strong contributors in the development and launching of Reform 94. (See annex I, figure 2 and annex II, appendix 1).

The social partners' contribution to the formation and implementation of vocational training in Norway is institutionalised through the Act concerning Vocational Training. It is also expressed through set procedures for representation, participation in the development of curricula and the contribution to reports concerning the different fields and levels of education and training. The responsibilities and involvement of the social partners are also determined by work and wage agreements.

In addition to co-operating with and advising the authorities, the social partners fulfil their usual roles in the field of vocational training and in the working community. Another important area of activity for the social partners is that of working conditions and the working environment. As part of this work, they negotiate on the function and responsibilities of skilled workers in the respective trades. The Ministry also co-operates with the social partners on decisions concerning which professions and types of training to support through the public training and certification system.

#### 4.1.2 *The labour market programme Trainee Places*

The PES has extensive co-operation with local governments, regional authorities and social partners in the implementation of labour market policies. Co-operation consists both of co-ordinated efforts towards job-seekers and the disabled, as well as planning and arranging of labour market schemes. To strengthen regional co-operation, regional councils were set up on the initiative of the Ministry of Local Government and Labour. The aim of these councils is to contribute to the co-ordination of training and education at the local level, with the view of meeting the needs of the unemployed, as well as that of local businesses.

The employers' and employees' main organisations (NHO and LO), on the national level, have been actively involved in developing the labour market programme Trainee Places. This programme is targeted towards young people and immigrants. The co-operation with the social partners about this programme has resulted in a stronger involvement from the enterprises in order to be able to offer a good combination of instruction and practice. As part of the programme, each youngster gets a "sponsor" as a personal guide in the enterprise.

#### **4.1.3 Industry<sup>24</sup>**

As mentioned above, the employers' and employees' organisations have participated in the policy formation process. Below follows a description of their experiences and future perspectives concerning co-operation, challenges and objectives.

«The Confederation of Norwegian Business and Industry (NHO) has initiated a programme called «Industry in schools». The aim of the programme is to inform pupils about business and industry in general. Educational authorities in every county are involved in the project. The Confederation of Trade Unions (LO) has a similar programme called «School and Working Life» aimed at providing pupils and teachers with information about possibilities in the labour market. The programme is aimed towards needs in the local labour market and is particularly directed towards vocational training.

Both NHO and LO point out that the situation on the labour market in Norway is somewhat different from the situation in most European countries, as unemployment in Norway is low compared to other European countries. They are under the impression that employers in Norway «fight» for young people with trade and journeyman's certificates. Still, it is a major concern that unemployment among young people is higher than overall unemployment, even though most unemployment among youths is short-term unemployment.

One concern is that the counties, when planning courses, emphasise the pupils' freedom of choice more than the local labour market's needs. Another factor is that young people are reluctant to move to other counties where the courses of their choice are offered, and they are also reluctant to move in order to obtain work. Another dilemma is that trades and industries in a region might be reluctant to take on young people from other regions as apprentices, as they prefer locals who probably are more likely to stay on with the company, when trained as a skilled worker.

In principle, NHO and LO and the training councils support the «2 + model», but they are worried about the pupils who have to finish their training at school because of lack of apprenticeship places, thus leaving them with only three years of school education before taking trade or journeyman's examinations.

The pupils who receive a trade or journeyman's certificate after three years at school will have more problems on the labour market in competition with those who have received the intended training in an enterprise (two years).

NHO and LO point out that they are concerned with the educational and training opportunities in Norway as a whole. They do however point out that their member enterprises, in particular small and medium sized enterprises, might be more concerned with their own needs for manpower. These enterprises are more likely to take on apprentices for later employment in their own enterprise than to provide training for

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<sup>24</sup> Information obtained through interviews with LO and NHO and the training council for electromechanical, mechanical and engineering trades (ORMET), Aug. 97.

the common good. The training council for electromechanical, mechanical and engineering trades (ORMET) points out that it might be difficult to change this attitude.

There is a conflict of interest between the demands of the different trades, on the one hand, and interests of the main employers' and employees' organisations, on the other hand. Many trades report that they have taken on the number of apprentices they need for the moment, while LO and NHO are concerned about the future needs for competence. NHO points out that the municipalities would be the best bodies to provide prognoses on development in the local labour markets, thus being able to inform the county municipalities so that they can plan courses in a more long-term perspective.

ORMET points out the need for good educational and vocational guidance to cope with the mismatch problem in certain industries. Projects where the potential of apprentices is analysed for different regions are necessary, so is more long-term planning. The different trades lack figures, therefore it is important to contact those responsible for the development of industry in the different counties.

Another problem pointed out by ORMET is that some teachers have outdated competence, and since the seniority principle governs when hiring teachers, young teachers (who have adopted the new teaching methods) are not able to get the jobs.

The social partners also emphasise the need for better educational and vocational guidance in lower and upper secondary schools in order to cope with the mismatch problem. NHO and LO regard exchange agreements between schools and enterprises as a positive contribution to improving knowledge about working life in schools.

ORMET claims to be satisfied with the tripartite-co-operation and the dialogue with the Ministry through the process of implementing the reform. ORMET does however think that the training councils should have been more involved in the measures for further education of the education boards responsible for trade and journeyman's examinations. NHO and LO assert that they are satisfied with the tripartite co-operation at upper secondary level, but they think it can be improved in higher education.

ORMET thinks that in order to improve young people's transition to working life it is important to establish contacts with state colleges as early as in upper secondary education. The co-operation between state colleges and industry in the different regions should be developed in order to improve the through-flow of pupils from upper secondary education to higher education.

#### **4.1.4 *Young people***<sup>25</sup>

The pupils' organisations have contributed with advice on policy formation. Below follows a description of their experiences and future prospectives concerning co-operation, challenges and objectives.

The pupils' organisations state that trends in society affect youths transition to working life. As of today, when the economy has an upward trend and unemployment is low, youths have a more positive outlook at the future and future possibilities, and therefore are more likely to use more time to «broaden their horizons». The pupils' organisations are however concerned about the "back-waters" of students seeking access to higher education.

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<sup>25</sup> Information obtained through interviews with the pupils' organisations, Aug. 97.

The statutory right to upper secondary education gives pupils the opportunity to take one year off during their studies, as the right must be taken out within a four-year-period. This limitation constitutes a problem for applicants who chose a new area of study when the reform entered into force and for applicants with a statutory right who have changed foundation course, or area of study more than once or during advanced course I, thus losing their right to upper secondary education. The pupils' organisations point out that there is no guarantee to be admitted to the advanced course I and advanced course II of one's choice and many pupils have to complete their vocational training at school due to lack of apprenticeship places.

The pupils' organisations assert that the counties do not concentrate on providing courses adapted for applicants without a statutory right e.g. comprised courses, courses that last longer than the estimated time, courses offered in the evening etc. They assert that the right to upper secondary education should be expanded to include those above the age of 19 and that it should not be limited to a four-year-period. This would leave greater freedom of choice and also improve the situation for young people above 19 years of age who have not completed their upper secondary education. In the long run, this would ease young people's transition to working life, as young people's employability seems to be proportionally increased with their level of education.

The pupils' organisations report that, at upper secondary level, there seems to be a different development between those attending general courses and those attending vocational courses, when it comes to interruption of studies for a year. Young people attending areas of study leading to university or college entrance qualifications seem to be more likely to interrupt their studies during and after finishing upper secondary education, while those attending vocational areas of study are less likely to do so. Pupils who are able to attain an apprenticeship contract are also more likely to finish upper secondary school without interruptions, than those who are attending vocational courses where it is difficult to obtain an apprenticeship contract. The latter group is more likely to change their area of study after completing the foundation course. The pupils' organisations assert that better educational and vocational guidance at lower secondary level is a necessity when it comes to limiting this trend.

The pupils' organisations also point out that the transition to working life may be more difficult for those who have had to finish their vocational training at school, due to lack of apprenticeship places. They also emphasise the need for attitude changes to make activities in schools more coherent with developments in society.

Even though the new curricula emphasise a broad concept of knowledge, more in-service-training for teachers is necessary to make them more adaptable to changes in society.

#### **4.1.5 Teachers' organisations<sup>26</sup>**

The teachers' organisations are major contributors to the policy formation process, as they give advice on educational and training policies. Below follows a description of their experiences and future prospectives concerning co-operation, challenges and objectives.

According to the teachers' organisations teachers' knowledge of and co-operation with business and industry is not institutionalised, but is based on the individual teacher's interest in acquiring knowledge of business and industry. Teachers who teach vocational subjects are more familiar with business and

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<sup>26</sup> Information obtained through interviews with the teachers' organisations, Aug. 97.

industry than those teaching general subjects. Teachers of general subjects might therefore need more encouragement in order to integrate knowledge of business and industry in their teaching.

The teachers' organisations assert that it is important to distinguish between the individual teacher's background and his/her need for professional development; thus both teachers of vocational subjects and teachers of general subjects need in-service training and further and continuing education. The teachers' organisations also point out that the need for professional development is the same among teachers in primary and lower secondary education as it is in upper secondary education. In order to cope with the mismatch problem it is important that the current reform of the teachers' education as well as in-service-training and continuing education focus on developments in business and industry.

The teachers' organisations are positive to the development and strengthening of co-operation between schools and industry, but they point out that it is important that contacts must be made both ways (schools- industry/ industry- schools). The teachers' organisations point out two major problems within vocational areas of study:

- The trade and journeyman's examinations are evaluated by examination boards. Upon the implementation of Reform 94, the number of members on the examination boards was reduced from three to two. Both members shall have formal vocational competence and ideally also work experience in the relevant trade. According to the teachers' organisations this makes it more difficult for teachers as they are not assured a place on the board as they were previously, and therefore it has also become more difficult for teachers to know the requirements of the trade and journeyman's examination.
- Furthermore, the teachers' organisations think the «2+ model» is too rigid. They think it would be easier for pupils to adapt to working life if they were given the possibility of alternating between school and enterprise. The teachers' organisations are afraid that pupils who have had to finish their vocational training at school (advanced course II) due to lack of apprenticeship places will have more problems with transition to working life. On the other hand, they also see the dilemma between the pupils' freedom of choice versus the labour market's needs for competent manpower. The teachers' organisations also point out that the choices made by pupils today are somewhat different than before, as many choices have already been made for them in the new educational system (e.g. statutory right to 3 years of education).

The teachers' organisations also point out the problems faced by those who are not covered by the statutory right to 3 years of upper secondary education. They have registered a tendency among adults to move sideways in the educational structure, since the county authorities have not planned any advanced courses I in the area of study of their choice. Therefore the through-flow of pupils is not as good as expected before Reform 94. The results of the project dealing with partial competence might prove to improve the possibility of building up partial competence qualifications to ease the transition to working life for youths in the age group 19-30 who lack or have not finished upper secondary education.

When it comes to participation in the policy formation process, one of the organisations want an institutionalised right to representation, whereas the other organisation is satisfied with the situation as it is today, where the Ministry asks them for advice on appointment of representatives to different committees etc.

When it comes to transition from upper secondary education to higher education, the teachers' organisations point out the need for more information about the system of higher education, as most teachers only know the educational programmes they have attended themselves.

## CHAPTER 5: MONITORING AND RESEARCH

For monitoring and research on labour market policy, see chapter 3.

### 5.1 Monitoring and research at upper secondary level

#### 5.1.1 *National monitoring*

The Ministry of Education, Research and Church Affairs obtains reports and statistics on results of examinations, including trade and journeyman's examinations, from the National Examination Board (Eksamenssekretariatet) and from the county municipalities. These statistics are not sufficient in order to provide information on an individual level, therefore a data base is being developed supplying information of individual results.

The Ministry also obtains statistics on the number of pupils and apprentices directly from the county municipalities.

The 18 National Education Offices that are attached to the Ministry of Education reports to the Ministry every year on issues concerning education and training.

#### 5.1.2 *Evaluation of Reform 94*

The initial phase of the educational reform has been followed by an ongoing evaluation by seven different research institutes. (See annex II, table 8).

The evaluation should satisfy the following two main objectives:

- the evaluation should determine to what extent the most important goals of the reform have been attained,
- the evaluation should provide information and insight while the evaluation itself is in progress. This should be in a form which will enable quick decisions on necessary adjustments and corrections to be made, with a view to changes and improvements in the light of the goals of the reform.

The Ministry of Education, Research and Church Affairs regards four main areas as important to assess:

1. Scale and capacity
2. Through-flow and qualifications
3. Organisation and co-operation
4. The content and structure of education.

In addition, the following issues are regarded as important for the evaluation of the reform:

- adults
- applicants with Norwegian as their second language
- applicants with a recognised need for special education
- the follow-up service for which the regional authorities are responsible.

A general concern touching on each of the main priority areas, is the question of gender distribution.

### ***The flow of pupils through upper secondary education***

The intention of Reform 94 is to provide a training supply with a best possible exploitation of resources, with as few unnecessary wrong choices as possible and without backwaters.

The research-based evaluation of Reform 94 shows that the reform has had a positive effect on the flow of pupils through upper secondary education. The share of those following normal progression has increased by 10 per cent after the introduction of the reform. The effect is particularly strong within vocational training, where the share of those following normal progression has increased from 30 per cent to 58 per cent.

A study conducted by the Norwegian Institute for Studies in Research and Higher Education (NIFU) for the autumns of 1994 and 1995 deals with the new educational system's success with regard to reaching the target of better flow of pupils through the system. NIFU has followed the first Reform cohorts (those who started a foundation course during the autumn of 1994). The study distinguishes between the pupils who have a statutory right to 3 years of upper secondary education and those that do not have this statutory right.

### *The through-flow of pupils from foundation course to advanced course I -- a comparison between the 1989 cohort and the 1994 cohort*

94 per cent of the 9th grade cohort of 1994 started upper secondary education in the autumn of 1994. A year later, 77 per cent had a normal progression through foundation course to advanced course I compared to the 9th grade cohort of 1989, where this percentage was 66.

### *The situation in the autumn of 1995 for the 1994 cohort -- transition from foundation course to advanced course I:*

- 92.9 per cent were still undergoing upper secondary education
- 81.3 per cent continued on to an advanced course I within the same area of study
- 2.3 per cent took the same foundation course again
- 4.3 per cent applied for a new foundation course
- 3.4 per cent followed a special programme, taking the foundation course over a period of two years
- 3.6 per cent did not accept the educational offer they were given.

For the pupils without a statutory right, the situation was completely different:

- 47.3 per cent continued on to an advanced course I within the same area of study
- Close to 1/3 of the cohort did not continue, either because they did not apply (10 per cent), or they were not offered a course (15.2 per cent) or because they did not accept the offer (4.9 per cent).

*The situation for the 1994 cohort -- transition from advanced course I to apprenticeship place in enterprise/advanced course II at school (autumn 1996):*

- 86.4 per cent of the cohort were still undergoing training either at school or in industry
- 73 per cent followed the normal progression
- 13.4 per cent were delayed due to the fact that 3 per cent were at foundation course level and 10.4 per cent were still on advanced course I level.
- 2.6 per cent (of pupils in vocational areas of study) had chosen an advanced course II in general subjects to obtain entrance qualifications for higher education.

For pupils without a statutory right the situation was different:

- Half of the cohort from 1994 did not receive upper secondary education in the autumn of 1996. NIFU explains that this is due to pupils who failed to apply for a course or who rejected to accept the course they were offered.
- 35.5 per cent of the cohort followed normal progression
- 12 per cent were delayed, most of them by a year.

*Increased through-flow in vocational areas of study -- comparison between the 1991 cohort and the 1994 cohort*

The share of those following normal progression in the vocational areas of study has increased from 30 per cent before the reform to 58 per cent after the reform. According to NIFU, this is due to the fact that the proportion of those being delayed in the system has been reduced by 50 per cent after the introduction of the reform, at the same time as the proportion of drop-outs has been reduced.

### ***Apprenticeship places***

*Allocation of apprenticeship places in 1996 and 1997:*

The social partners and the Ministry have agreed to share the responsibility for the vocational education of skilled workers. A major condition for the proper functioning of this agreement, is that business and industry provide a sufficient number of apprenticeship places. The agreement is based on voluntary participation by the enterprises.

The county municipalities are now into their second year of allocating apprenticeship places. So far, experience shows that the target of allocating enough places, has not been achieved. Many young people have not received their final training in an enterprise.

The 1996 status reports<sup>27</sup> show the following:

- More than 16 000 pupils applied for an apprenticeship place; of these 10 000 had a statutory right to upper secondary education
- There were 16 500 apprenticeship contracts agreed
- 9 550 applicants received an apprenticeship place; of these 6 400 had a statutory right to upper secondary education

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<sup>27</sup> Statistics, Ministry of Education, Research and Church Affairs, 1997.

- 7 000 adults outside the scope of the reform were allocated an apprenticeship place
- 3 000 reform-pupils did not receive an apprenticeship place, and accepted the offer of completing their vocational training by attending an advanced course II at school
- 2 700 applicants withdrew their applications for an apprenticeship place or turned down the offer they were given.

A mismatch of both a vocational nature and a geographical nature has been revealed.

The results from 1996 showed that for certain vocational areas of study, there was a mismatch between the number of applicants applying for an apprenticeship place and the number of places available. In some trades there were too many applicants compared to the number of apprenticeship places, while the problem in other trades has been to recruit enough apprentices to meet future needs.

The trades concerned are the care workers, child and youth work, the electrical trade, cooking, carpentry and the repair of light vehicles. Fully 45 per cent of the pupils did not receive an apprenticeship place, thus the training for these people had to take place at school. (See annex II, figure 4).

In the following trades it was difficult to recruit enough apprentices: Building and Construction Trades, Technical Building Trades, Processing Trades and some within the mechanical and engineering trades.

There was a geographical mismatch throughout the country; while there in certain parts of the country were available apprenticeship places in a specific trade, there was a lack of apprenticeship places in the same trade in other parts of the country.

The counties had to establish more than 270 classes for the applicants who did not receive an apprenticeship place. Those who attended these courses finished their vocational training in June 1997. They have taken their final examinations in order to obtain their trade or journeyman's certificate. We still do not have the final results, but reports so far indicate that many of them have failed.

Temporary figures<sup>28</sup> from 1997 show the following:

- 17 320 applied for an apprenticeship place; of these 11 500 had a statutory right to upper secondary education.
- Enterprises had made preliminary agreements to supply 16 200 apprenticeship places.
- By 1 September, 10 300 apprenticeship contracts were agreed.

The process of allocating applicants to apprenticeship places ended 15 September, but the numbers are not available yet. It is expected that the number of apprenticeship contracts has increased. Those who have not been able to obtain an apprenticeship contract will be offered an advanced course II at school.

The mismatch in 1997 is within the same trades as in 1996. The problem of recruiting enough apprentices within the building and construction sector has increased markedly in 1997.

Preliminary results of the research show that:

- The total volume of new apprenticeship contracts increased by 60 per cent from 1995 to 1996.
- More young apprentices are given an apprenticeship than before. The aim of achieving a greater number of youths in apprenticeships has therefore been reached. The number of young apprentices (18

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<sup>28</sup> Statistics, Ministry of Education, Research and Church Affairs, 1997.

years or younger) increased nearly tenfold - from 711 in 1995 to 6 457 in 1996. However, immigrants who have Norwegian as their second language and pupils with special training needs and handicapped have greater difficulties than the lot when it comes to obtaining an apprenticeship place.

- Girls may have greater difficulties than boys getting an apprenticeship contract within certain male-dominated professions. Girls and boys still choose vocational courses which correspond to the traditional gender roles. The Ministry of Education, Research and Church Affairs is about to launch a project «Conscious Educational Choices» which shall contribute to making the labour market less marked by traditional gender distribution.

The project's two main aims are:

1. To qualify and motivate youths to make conscious educational choices without regard to traditional patterns.
2. To identify and to adapt as much as possible central aspects of the framework for education which make such choices possible. (For further information, see section 5.3).

*Which measures were taken?*

The problems on the apprenticeship market have been at the centre of discussions during the past two years with the social partners and the counties. The ad hoc measures which have been possible to implement by the parties involved, have been implemented. The following can be mentioned:

- Information campaigns have been carried out in order to make enterprises take on more apprentices. Newspapers and television media have been used for this purpose.
- In 1997, special economic grants were awarded enterprises in order to stimulate the enterprises to take on apprentices.
- Strengthened vocational guidance in lower secondary schools has been introduced in order to give youths more information about upper secondary education and about trades where there are available apprenticeship places.

In 1997, a white paper was presented to the Storting on the situation of the apprentices with proposed measures to be implemented if the situation does not improve. The measures that are listed are both foreseen on a short-term basis and on a long-term basis.

1. A fund system is to be initiated in co-operation with the social partners. This alternative entails that working life as a whole must take responsibility for the salaries of the apprentices by paying into a fund. Thereafter resources are paid out from the fund to enterprises which take on the responsibility of training an apprentice. Contributions to the training part of the apprenticeship are given to the enterprises by the educational authorities on the same basis and according to the same rules as before.
2. The social partners in the private as well as in the public sector are asked to submit prognosis for future work force needs so that the educational authorities supply the courses at upper secondary schools in accordance with these needs.
3. Vocational and educational guidance is to be strengthened to provide youths with knowledge about different trades and available apprenticeship places, as a basis for young people's right choice of educational pathway. This work will be done in close co-operation with the social partners.
4. The Ministry is currently considering changing the vocational pathways, especially with a view to achieving smoother transitions between vocational courses that are closely related.

### ***The follow-up service***

The follow-up service is based on interdisciplinary co-operation and interaction between different bodies such as: primary and lower secondary schools, upper secondary schools, the Public Employment Service, social and health services etc. The follow-up service is responsible for co-ordinating measures from these different bodies.

So far, experience shows that the follow-up service proves to give good results. The counties have been able to survey the youth cohorts. Young people who are not attending upper secondary school for one reason or another, are being contacted. Estimates from the follow-up services (1 July 1997) show that more than 97 per cent in the age group 16-18 who have a statutory right to upper secondary education, are either receiving education or are employed. Records from the follow-up service show that in the school year 1996/97 there were 7 per cent of the youths who had a right to education who had a need for guidance and to be followed up. About 4 per cent have during the course of the school year accepted an offer of education or work. 1.5 per cent were still being followed up by the counties. Less than 0.5 per cent has rejected help from the follow-up service and about 0.3 per cent have been impossible to trace.

### ***Interruption of studies***

3.6 per cent of all pupils and apprentices with a statutory right to education (3 cohorts) have interrupted upper secondary education/training. The reports reveal that there are great differences between the counties; expanding from 1.5 per cent in one county to 7 per cent in another county<sup>29</sup>.

Pupils who interrupt upper secondary education, either because they do not accept or apply for a place in upper secondary education, are more likely to resume their education than they were before Reform 94. Figures from NIFUs<sup>30</sup> research shows that nearly  $\frac{3}{4}$  of the pupils who did not receive education in the school year 1995/96, appeared as applicants in 1996/97.

Experience from the follow-up service shows that youths who are under the responsibility of the follow-up service, are not necessarily «lost for schooling» forever, even though they drop-out one or several times. Therefore, it is important that the «school gate is kept open» and that they are given several chances of re-entry.

Researchers who evaluate the follow-up service pointed out in their report of February 1997<sup>31</sup> that their most interesting finding was: youths who have combined school education with training in an enterprise are significantly more likely to choose school the second year than those who had chosen other solutions e.g. attended school, participated in a placement scheme, worked or just stayed at home.

### ***Youths with special educational needs (Handicapped)***

Applicants who are 20 years old or younger, with the support of expert opinion, have the right to a special needs education and are entitled to be admitted to their first-choice foundation course. The aim of this

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<sup>29</sup> Statistics, Ministry of Education, Research and Church Affairs, June 1997.

<sup>30</sup> NIFU, Rapport 1/97: «Etter halvgått løp» (Half-way through).

<sup>31</sup> FAFO, Notat 1997:2 «Evaluering av oppfølgingstjenesten i Reform 94» (Evaluation of the follow-up service of Reform 94).

provision is to make sure that the authorities, during the intake to a field of study, take into consideration the specific educational needs handicapped pupils have. The main consideration to be taken into account when choosing a foundation course for these youths, must be to find a field of study which in a large measure will provide competence for working life. Many of these pupils choose the three vocational subject areas: mechanical trades, health and social studies and the hotel and food-processing trades. There was also a similar bias before Reform 94.

Regarding special needs education, the educational opportunities differ somewhat from county to county. About 60 per cent of the pupils the research institution «Møre Research» calls «pupils who have a need for a special, adapted education» are integrated in normal classes. This means that about 40 per cent attend special classes. There are great variations from county to county. In the county Møre og Romsdal 76 per cent of the pupils receiving specially adapted training are integrated in normal classes, while only 37 per cent and 39 per cent are integrated in normal classes in Hedmark and Oslo respectively<sup>32</sup>.

«Møre Research» also deals with the situation of so called «grey-zone pupils»: Pupils who have special educational needs, but who did not mention this in their application; thus the school has no information about their needs. This might have serious consequences for the organisation of their education. Since the school has no information concerning their specific difficulties and needs when they start upper secondary school, it might take considerable time before the necessary mapping is done and measures are implemented.

### ***Transition from school to working life for handicapped youths***

During the last 10-15 years there has been an increasing trend to integrate handicapped in ordinary education and training schemes. Unfortunately, there has been no indication of increased transition to working life among handicapped youths. The Ministry of Education, Research and Church Affairs in co-operation with the Ministry of Local Government and Labour and the Ministry of Health and Social Affairs have completed a project aimed at finding measures to improve handicapped youths' opportunities for transition to working life and participation in society as a whole - after having completed their upper secondary education.

The results of the project revealed that the handicapped youths who had participated in the project had the necessary qualifications to participate in working life and to be integrated in ordinary employment, provided they received the necessary aid and support. The project revealed a strong need for an interdisciplinary co-operation and the need of co-ordinating the different bodies' individual programmes for action. The co-operation between different bodies in support groups gave positive results. The results also indicated that it was a necessity to have one body co-ordinate the division of responsibility in the different stages of transition from initial education to working life.

The Ministry of Education, Research and Church Affairs, the Ministry of Local Government and Labour and the Ministry of Health and Social Affairs have discussed measures to ensure that actors on the supply side co-ordinate their activities towards one main objective: employment, primarily in ordinary working life.

As an exception from the rule, it is in specific situations possible to obtain a trade or journeyman's certificate without meeting the theoretical requirements in the general subject areas. (See annex II, figure 2). This exception only applies to apprentices who can supply an expert opinion verifying they have e.g.

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<sup>32</sup> Høgskolen i Volda, Møreforskning Volda, Research report no. 24/97 «På særvilkår» (Special needs education)

dyslexia, or who of specific reasons have been excused from attending these courses in primary and lower secondary school.

## 5.2 Monitoring and research in higher education

In Norway, what we have seen lately, is that in times of relative higher unemployment for graduates from tertiary education, students tend to stay on and continue to higher degree studies rather than seek employment after completion of a lower degree. It should be noted, however, that the possibilities on the labour market for most graduates from tertiary education still are relatively good, and that so far, graduate unemployment has not been considered a serious problem, like it is in many other countries.

In 1994, unemployment among those with 1 - 4 years of higher education (HE) was 2.3 per cent (of the population aged 16 to 74), and for those with 5 years of HE or more it was 1.4 per cent, compared to an overall average of 3.7 per cent. In 1995, the numbers of unemployed in these categories were 2.5 per cent and 1.3 per cent respectively, compared to an overall percentage of 3.4. However, as the labour market is presently undergoing significant changes over a relatively short period of time, in that large numbers of well educated young people are entering the labour market, the situation is quickly becoming more complex, and is being followed closely by national authorities.

The Norwegian Institute for Studies in Research and Higher Education (NIFU) made its first survey of the situation for university graduates on the labour market in 1972. For the past eleven years, such surveys have been made on a yearly basis. Every second year, the surveys have dealt with the situation for various categories of university and college graduates 6 months after graduation, and in the years in between, there have been follow-up analyses of their work situation 2,5, or 10 years after graduation. This pattern was interrupted this year, as the 6-months-after 1995 survey was followed by a 6-months-after survey for 1996 as well. Every year, all the graduates with a higher university degree (level 7, ISCED) are included in the survey<sup>33</sup>, whereas the other categories of graduates may vary from one year to another.

The general trend of the 1995 survey was that fresh graduates were having a more difficult transition period before integration into working life than they used to, despite the fact that the entire expansion of the labour market in the period 1993 to 1995 concerned jobs requiring a higher education background. In 1995, 12 per cent of higher degree graduates were unemployed 6 months after graduation, as opposed to 9 per cent in 1993, mostly because of the important increase in the number of graduates.

The six-months-after 1996 survey gives signs of better opportunities on the labour market for several groups of fresh graduates in 1996, and the overall percentage of unemployed 6 months after graduation went down from 12 in 1995 to 10 in 1996. It should be noted, however, that another 10 percent report 'insufficient adaptation' to the labour market, either because they are under-employed (i.e. involuntary part-time) or because they consider that their job is irrelevant for their qualifications. The groups with the highest decline in unemployment from 1995 to 1996 were graduates in business administration (down from 10 per cent in 1995 to 4 per cent in 1996) and in engineering (5-year degree, "sivilingeniør"). For the latter, the overall percentage of unemployed went down from 17 in 1995 to 9 in 1996. Unemployment for graduates in natural sciences went down from 11 per cent in 1995 to 9 per cent in 1996, and for graduates in social sciences it went down from 13 to 9 per cent in the same period. In the humanities, unemployment

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<sup>33</sup>In the 6-months-after surveys, the only exceptions to this are graduates in Medicine, which at that time will invariably be doing their in-service training, and the Law graduates in the 1995 survey, of which there was made a selection of two thirds of the total population.

went up from 5 to 8 per cent from 1995 to 1996, which is not too bad considering that the number of graduates increased by 22 percent in the same period.

The 1996 survey shows that there are two groups of fresh graduates that seem to have important problems of unemployment: First, architects - of which 27 per cent were unemployed in 1995 and 33 per cent in 1996, with no increase in the number of graduates. Second, graduates in law, among which the number of graduates increased by 60 per cent from 1993 to 1995, and unemployment increased from 9 to 19 per cent.

### **5.3 Future aspects of the educational policy**

Based on experience, the Ministry of Education, Research and Church Affairs has decided upon further measures to encounter the problems of mismatch:

- The development of support material, giving methodological advice to teachers and school counsellors regarding the integration of vocational guidance and learning activities from 8th grade of lower secondary school to advanced course I at upper secondary school. Support material will also be handed out to pupils of upper secondary school in relation to their choice of vocational course and the application for apprenticeship. The main focus of the support material will be on the development of young people's knowledge and consciousness of the relationship between their own abilities and the demands and availability of the labour market, as basis for making their own qualified decisions regarding education and future work.
- The Ministry has also initiated actions to encounter problems of vocational guidance related to gender, ethnic background and differences of physical and mental abilities through the launching of the 3-year-project «Conscious Educational Choices». The project is aimed at gaining knowledge of effective strategies and models of educational and vocational guidance through carrying out action plans, followed by evaluation and dissemination of results. The project will be carried out in co-operation with regional authorities.
- Of vital importance is also the securing of quality of updated electronically based guidance. The Ministry has recently started the planning of a national data base providing educational and vocational guidance on available apprenticeship places and jobs as well as educational and vocational opportunities in upper secondary education for each county and the country as a whole. The social partners will be asked to contribute with information about the different trades. The measures are being planned in order to make the system of free flow of pupils and apprentices across county borders work more sufficiently.
- The results of the research-based evaluation of Reform 94 will be presented in a white paper to the Storting in the spring of 1999.

In addition, the Ministry is about to implement 2 new reforms:

- Teachers' education
- Further and continuing education.

Time will show whether or not the different measures will contribute to a better transition from school to working life.

#### **5.4 Future aspects of the labour market policy**

Even with continued increase in the employment the following years, it will still be necessary with targeted efforts towards groups with a difficult situation in the labour market. As a consequence of reduced unemployment, the number of places in labour market programmes will be reduced. In this situation priority will be given to information, vocational guidance and placement. Labour market programmes will mostly be used to qualify long-term unemployed, among them young people, for ordinary work. An important issue will be the co-ordination between public agencies, so that persons who need assistance from more than one agency (among them young people) can receive co-ordinated support, in order to get access to the labour market or education and training opportunities.

**ANNEX I: STATISTICS FROM THE DIRECTORATE OF LABOUR AND STATISTICS NORWAY (SSB)**

**Table 1. Main features of labour market developments. Yearly averages (1 000 persons)**

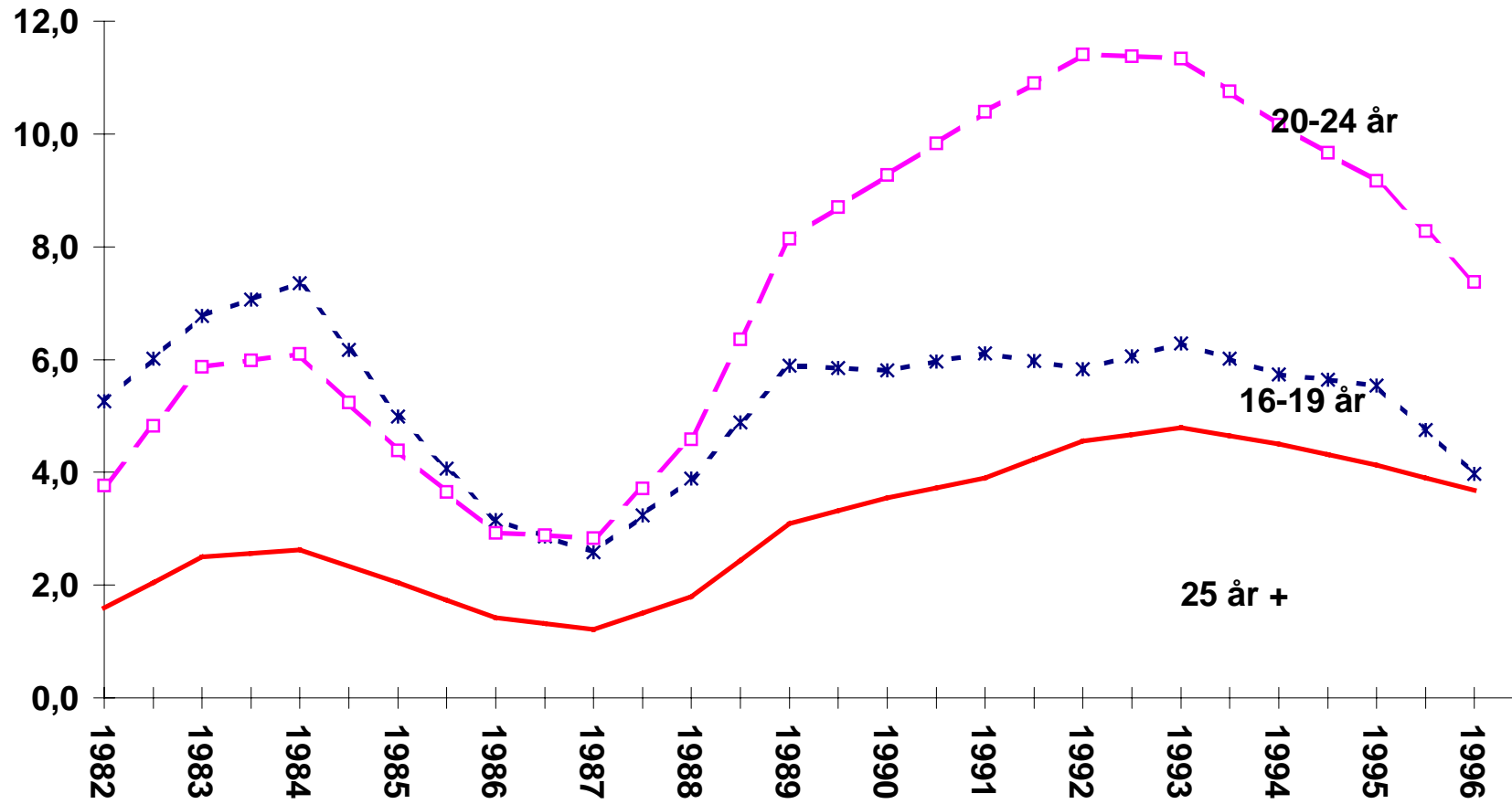
	1991	1992	1993	1994	1995	1996	1. half of 1997
Labour force	2 126	2 130	2 131	2 151	2 186	2 246	2 281
Employed persons	2 010	2 004	2 004	2 035	2 079	2 137	2 178
Unemployed persons <sup>1</sup>	116	126	127	116	107	109	104
- in per cent of labour force	5,5	5,9	5,9	5,4	4,9	4,9	4,5
Registered unemployed persons	100 730	114 370	118 150	110 280	102 150	90 940	79 780
- in per cent of labour force	4,7	5,4	5,5	5,2	4,7	4,2	3,6
Participants in ordinary measures	44 960	49 110	57 260	55 840	44 780	37 060	26 520
- in per cent of labour force	2,1	2,3	2,7	2,6	2,0	1,6	1,2

*Note:*

<sup>1</sup> Statistics Norway has in 1996 altered the methods for employment surveys following recommendations from EUROSTAT. The new methods show a 0.5 percentage point higher unemployment.

*Source:* Statistics Norway and Directorate of Labour.

Figure 1. Registered unemployment in per cent of labour force according to age 1982-97.



**Annex I, Table 2: Main features of labour market developments in the age group below 25 years**  
**Yearly averages (1000 persons)**

	1991	1992	1993	1994	1995	1996	1. half of 1997
Labour force	335	324	309	302	296	306	300
in per cent of population	57,6	56,6	55,8	55,7	55,7	59,3	59,5
Employed persons	291	279	267	263	261	268	263
Unemployed persons <sup>1</sup>	43	44	42	38	35	38	38
in per cent of labour force	12,8	13,6	13,6	12,6	11,8	12,4	12,7
Registered unemployment	30 670	31 930	30 850	27 060	24 210	19 610	17 150
in per cent of labour force	9,2	9,9	10,0	9,0	8,2	6,4	6,1
Participants in ordinary measures	-	-	24 820	22 880	16 490	12 990	9 900
in per cent of labour force	-	-	8,0	7,6	5,6	4,2	3,3

*Notes:*

<sup>1</sup> Statistics Norway has in 1996 altered the methods for employment surveys following recommendations from EUROSTAT. The new methods show a 0.5 percentage point higher unemployment.

- figures not available.

*Source:* Labour Force Surveys, Statistics Norway and Directorate of Labour.

**Annex I, table 3. Population aged 16-19 and 20-24 by main activity.  
Per cent.**

	1992	1993	1994	1995	1996	first half of 1997 <sup>2</sup>
<i>16-19 years</i>						
Employed <sup>1</sup>	11	10	10	10	10	8
Attends school, studied	82	82	83	83	78	85
Other activities/unspecified	7	8	7	7	12	7
<i>20-24 years</i>						
Employed <sup>1</sup>	49	48	47	48	48	50
Attends school, studied	33	34	36	36	32	34
Homeworking	4	3	3	3	4	3
Other activities/unspecified	15	15	13	13	16	13

*Notes:*

<sup>1</sup> The term “employed” here includes full-time employed persons, as well as part-time workers who consider the employment as their main activity.

<sup>2</sup> From second quarter of 1997 the question scheme was revised. This has led to an increase in the activity called “employed” (before unspecified).

*Source:* Labour Force Survey, Statistics Norway.

**Annex I, table 4. Long-term unemployed in relation to registered unemployed by age.  
Per cent. June 1996 and 1997.**

	June 1996	June 1997
Below 20 years	5	5
20-24 years	14	15
25-49 years	30	33
50-59 years	44	48
60 years and over	78	78
All	31	35

*Source:* Directorate of Labour

**Annex I, table 5: Unemployment rates by educational attainment and age, 1995**

	16-19	20-24	25-29	30-34	35-44	45-54	55-64	16-64
Below upper secondary education	16,9	18,3	14,4	12,6	7	3,6	3,9	8,5
Upper secondary education	14,4	10,0	6,8	5,2	3,3	3,0	2,5	5,1
Non-university tertiary education	-	8,3	6,5	4,0	3,4	2,0	2,1	4,0
University tertiary education	-	7,0	4,0	2,5	1,2	0,8	0,9	1,9
All	15,8	10,3	6,9	5,2	3,3	2,6	2,6	5,0

*Source:* Labour force survey, Statistics Norway.

**Annex I, table 6. Labour market situation by level of education**

	Per cent					
	1985	1990	1992	1993	1994	1995
<b>Unemployment rate</b>	<b>2.5</b>	<b>5.2</b>	<b>5.9</b>	<b>6.0</b>	<b>5.4</b>	<b>4.9</b>
<i>of which</i>						
Primary school	3.6	8.4	8.9	8.9	8.4	8.5
Lower secondary	2.9	5.6	6.4	6.3	6.0	5.1
Upper secondary	2.2	5.4	6.4	6.4	6.0	5.1
Tertiary	1.0	2.0	2.8	3.7	3.3	3.3
<b>Participation rate</b>	<b>68.5</b>	<b>69.2</b>	<b>68.4</b>	<b>68.2</b>	<b>68.6</b>	<b>69.6</b>
<i>of which</i>						
Primary school	52.3	49.3	46.9	46.3	46.3	47.1
Lower secondary	72.4	71.6	69.8	69.4	69.2	69.2
Upper secondary	77.9	78.6	77.0	76.7	77.1	78.1
Tertiary	87.1	86.3	84.3	82.6	82.0	82.4
<b>Employment rate</b>	<b>66.8</b>	<b>65.6</b>	<b>64.3</b>	<b>64.1</b>	<b>64.9</b>	<b>66.2</b>
<i>of which</i>						
Primary school	50.4	45.1	42.7	42.2	42.4	43.1
Lower secondary	70.3	67.6	65.4	65.0	65.1	65.6
Upper secondary	76.1	74.3	72.1	71.8	72.5	74.1
Tertiary	86.2	84.6	82.0	79.6	79.3	79.7

Source: Statistics Norway

Annex I, table 7.

**Persons 16-29 years that completed an education in May or June,**  
by labour force status in November, level of education and age. Absolute figures and percentages. 1994

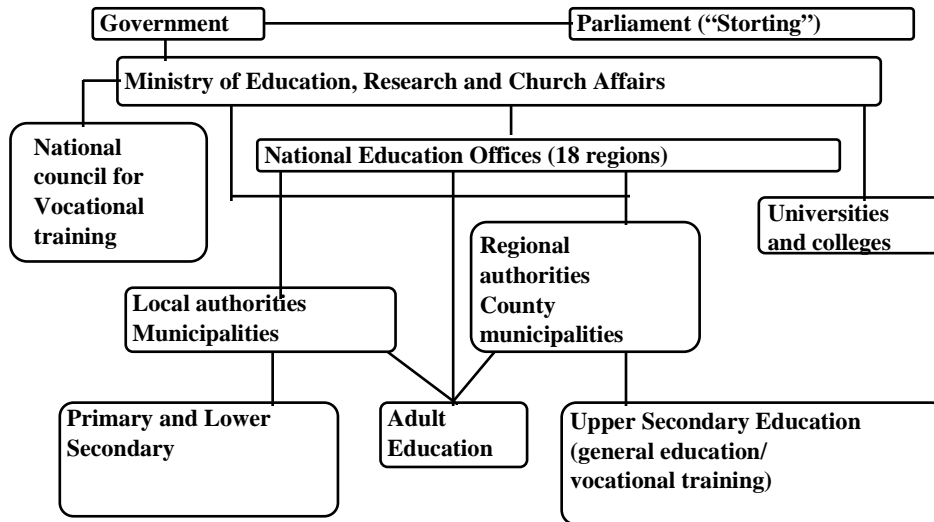
Status		Persons 16-29 years that completed an education in May or June, by labour force status in November, level of education and age. Absolute figures and percentages. 1994								
		Total	Employed persons	Persons employed by government measures	Registered unemployed persons	Ordinary education	Combining education and full-time employment	Combining education and part-time* employment	Others	
Total	Total	215638	31739	10745	5073	108972	7598	26693	24818	
	16-19 years	148911	11613	5637	1912	90855	3847	19585	15462	
	20-24 years	47413	12295	3356	2000	14471	2532	5966	6793	
	25-29 years	19314	7831	1752	1161	3646	1219	1142	2563	
Lower secondary school	Total	52432	307	447	154	44134	286	5803	1301	
	16-19 years	51667	232	130	76	44019	279	5784	1147	
	20-24 years	396	43	145	43	64	4	14	83	
	25-29 years	369	32	172	35	51	3	5	71	
Upper secondary school	Total	128148	19991	9367	4116	53761	5092	16083	19738	
	16-19 years	94947	11031	5440	1813	45751	3510	13393	14009	
	20-24 years	24766	6422	2667	1553	6140	1284	2345	4355	
	25-29 years	8435	2538	1260	750	1870	298	345	1374	
Tertiary education (1-4 years)	Total	31983	9816	798	639	10813	1910	4723	3284	
	16-19 years	2297	350	67	23	1085	58	408	306	
	20-24 years	21289	5424	506	365	8145	1145	3581	2123	
	25-29 years	8397	4042	225	251	1583	707	734	855	
Tertiary education (4 1/2 years and more)	Total	3075	1625	133	164	264	310	84	495	
	20-24 years	962	406	38	39	122	99	26	232	
	25-29 years	2113	1219	95	125	142	211	58	263	
<b>In percent</b>										
Total	Total	100	14,72	4,98	2,35	50,53	3,52	12,38	11,51	
	16-19 years	100	7,80	3,79	1,28	61,01	2,58	13,15	10,38	
	20-24 years	100	25,93	7,08	4,22	30,52	5,34	12,58	14,33	
	25-29 years	100	40,55	9,07	6,01	18,88	6,31	5,91	13,27	
Lower secondary school	Total	100	0,59	0,85	0,29	84,17	0,55	11,07	2,48	
	16-19 years	100	0,45	0,25	0,15	85,20	0,54	11,19	2,22	
	20-24 years	100	10,86	36,62	10,86	16,16	1,01	3,54	20,96	
	25-29 years	100	8,67	46,61	9,49	13,82	0,81	1,36	19,24	
Upper secondary school	Total	100	15,60	7,31	3,21	41,95	3,97	12,55	15,40	
	16-19 years	100	11,62	5,73	1,91	48,19	3,70	14,11	14,75	
	20-24 years	100	25,93	10,77	6,27	24,79	5,18	9,47	17,58	
	25-29 years	100	30,09	14,94	8,89	22,17	3,53	4,09	16,29	
Tertiary education(1-4 years)	Total	100	30,69	2,50	2,00	33,81	5,97	14,77	10,27	
	16-19 years	100	15,24	2,92	1,00	47,24	2,53	17,76	13,32	
	20-24 years	100	25,48	2,38	1,71	38,26	5,38	16,82	9,97	
	25-29 years	100	48,14	2,68	2,99	18,85	8,42	8,74	10,18	
Tertiary education (4 1/2 years and more)	Total	100	52,85	4,33	5,33	8,59	10,08	2,73	16,10	
	20-24 years	100	42,20	3,95	4,05	12,68	10,29	2,70	24,12	
	25-29 years	100	57,69	4,50	5,92	6,72	9,99	2,74	12,45	

\* Part-time employment is defined here as settled working hours/ usual working hours less than 30 h. per week.

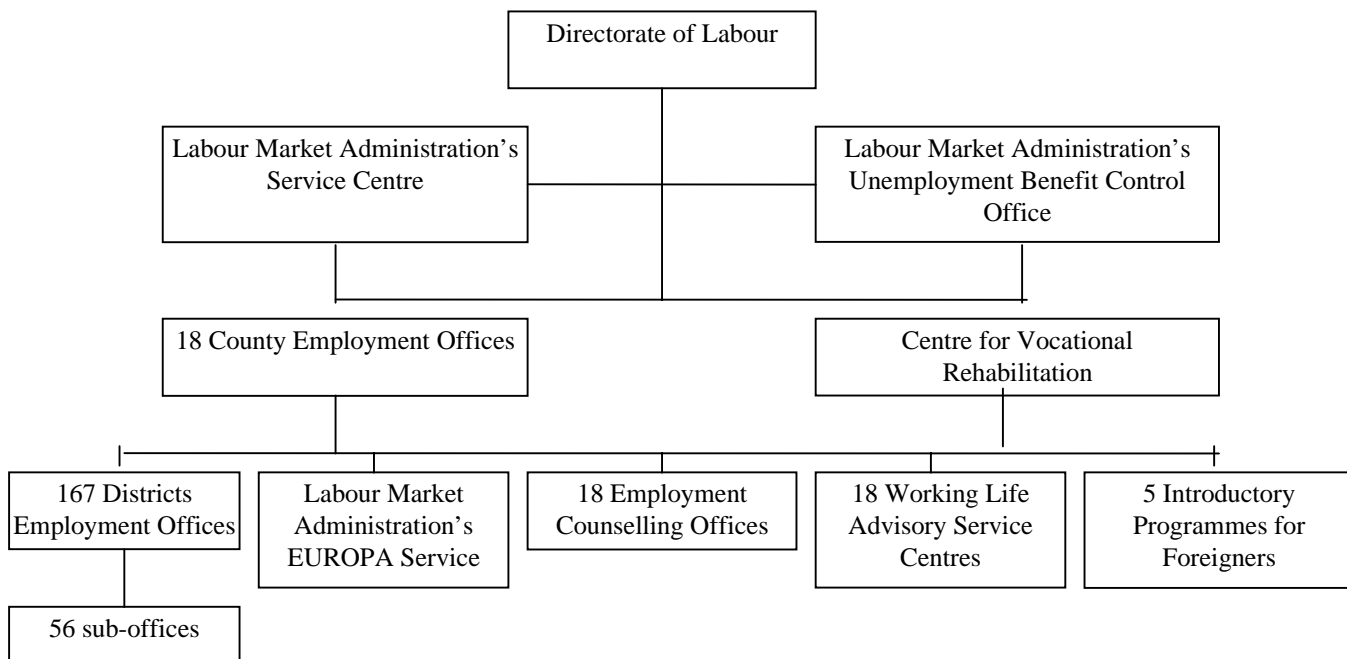
Source: Statistics Norway

Annex I, figure 2

### Administrative levels in the Norwegian Educational system



Annex I, figure 3 The Labour Market Administration



## **ANNEX I, APPENDIX I: THE DIFFERENT LEVELS OF THE EDUCATIONAL SYSTEM**

The administration of the education system is divided into three levels:

- National level
- County level
- Municipal level

### *National level*

The Ministry of Education, Research and Church Affairs has overall responsibility for the whole education sector: primary, secondary and higher education, as well as adult education and training. The Ministry administers the institutions of higher education and research directly. Various other ministries, however, are responsible for measures relating to education and training. These are primarily the Ministry of Local Government and Labour, which is responsible for employment policy, regional policy and immigration policy, and the Ministry of Industry and Trade, which is responsible for the industrial policy.

As a result of reorganisation of national education authorities in the early 1990s, 18 National Education Offices were established. The National Education Offices are attached to the Ministry of Education. The head of the office, a Director of Education, is the state representative at county level and is responsible for carrying out government tasks within the different fields of education. The areas of responsibility cover primary and secondary education, as well as vocational training, but not higher education. The main tasks are activity reports, information dissemination and, to a certain extent, legal supervision.

Decentralisation of decision-making has been a general trend in Norwegian education since the late 1980s. A major step in the direction of decentralisation was made by the introduction of a new sector grant system in 1986, in which municipality and county authorities receive a lump sum covering all central government subsidies for school education and culture as well as the health service and transport. As a consequence, the municipalities and counties now enjoy greater autonomy as regards the provision of education.

There has also been delegation of power of decision-making to the higher education institutions - first to the universities and university colleges through a 1989 Act concerning these institutions, and to the rest of the higher education institutions through the 1995 Universities and Colleges Act.

### *County level*

The county municipalities are responsible for upper secondary education - for the running of the schools, the intake of pupils, and apprentices and the appointment of teachers. Reform 94 brings together education at school and training in enterprises into a combined education system. As the owners of the schools, the counties currently have full responsibility for 535 upper secondary schools and for apprenticeship measures i.e., for vocational training in the workplace. The education authorities in the counties administer both the upper secondary schools and the apprenticeship

measures. As advisory bodies on vocational training, the counties have vocational training committees on which the social partners are in the majority.

The county has a duty to provide places for all the pupils with a right to vocational training.

The enterprise decides whether to accept the apprentice whose name is submitted by the vocational training committee. When it has accepted an apprentice, an apprenticeship contract has to be drawn up and sent to the vocational training committee for approval and registration

### *Municipal level*

The municipalities are responsible for education at the primary and lower secondary level. They are responsible for running the primary and lower secondary schools, for compulsory education, for the building and maintenance of school buildings, and for appointment of teachers. There are currently 3,208 primary and lower secondary schools. The municipal schools are responsible for the provision of guidance concerning working life and the choice of training and careers.

## ANNEX I, APPENDIX II: LABOUR FORCE STATISTICS

**Persons 16-29 years by labour force status and age. November 1993 and 1994. In percent.**

**Table 1.**

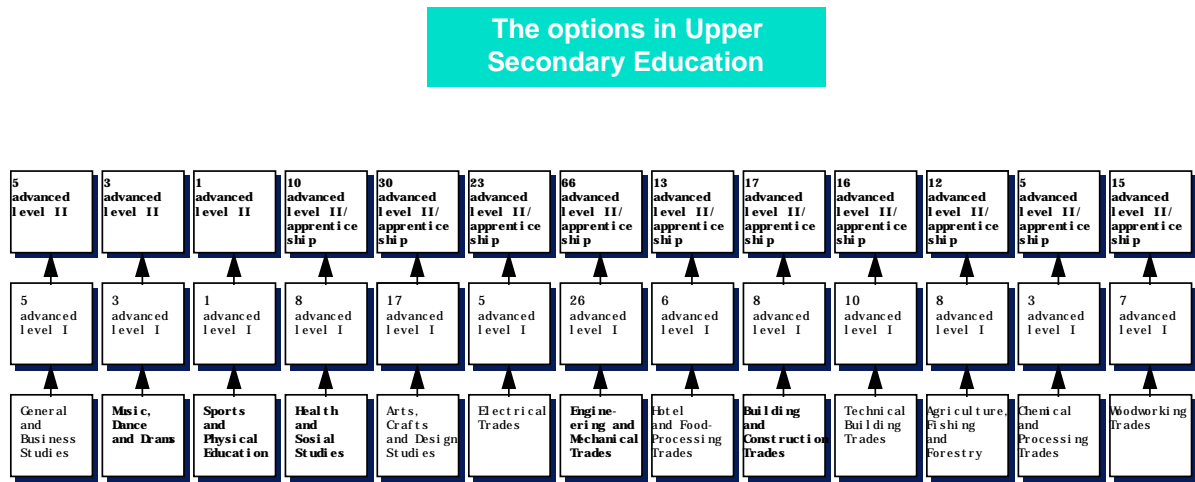
1993	Total	%	Status					
			Employed persons	Persons employed by government measures	Registered unemployed persons	Ordinary education	Combining education and full-time employment	Combining education and part-time* employment
Total	898700	100	36,61	5,02	4,47	25,95	3,95	7,37
16 years	52224	100	0,65	2,02	0,23	80,33	0,53	9,96
17 years	54804	100	2,11	2,64	0,54	73,41	1,45	13,61
18 years	57746	100	4,89	3,82	1,58	60,30	3,21	17,44
19 years	61225	100	16,77	8,32	3,52	32,53	5,06	10,89
20 years	62851	100	21,37	7,33	4,84	26,67	5,95	9,35
21 years	65710	100	27,51	6,73	6,30	24,74	5,43	9,35
22 years	66874	100	33,37	6,25	6,06	22,43	5,10	9,04
23 years	66139	100	39,17	6,00	5,74	19,30	4,54	7,72
24 years	69439	100	45,92	5,32	5,65	15,50	4,40	6,12
25 years	69316	100	51,57	4,94	5,44	11,82	4,33	4,51
26 years	68159	100	57,11	4,38	5,26	8,59	4,11	3,38
27 years	68772	100	60,02	4,18	5,49	6,62	3,78	2,43
28 years	67985	100	62,97	3,99	4,96	5,08	3,42	1,89
29 years	67456	100	65,26	3,69	4,73	4,01	2,90	1,57
<b>1994</b>								
Total	886795	100	37,84	4,60	3,91	25,76	3,89	7,84
16 years	53051	100	0,62	0,16	0,12	82,50	0,52	10,86
17 years	52483	100	1,94	2,11	0,59	73,37	1,27	15,05
18 years	55016	100	4,95	3,20	1,62	60,05	3,45	18,89
19 years	57871	100	17,85	7,40	3,19	32,25	4,94	11,23
20 years	61421	100	23,65	7,25	4,49	25,82	6,22	10,09
21 years	62928	100	28,51	6,10	5,20	24,28	5,78	9,96
22 years	65885	100	34,13	5,88	5,23	22,49	5,30	9,55
23 years	67107	100	39,52	5,66	4,90	19,55	4,82	8,78
24 years	66411	100	46,49	5,12	4,75	15,65	4,21	6,60
25 years	69662	100	52,68	4,66	4,90	11,83	4,05	4,90
26 years	69526	100	57,72	4,39	4,66	8,69	3,73	3,47
27 years	68325	100	61,84	4,02	4,57	6,63	3,47	2,58
28 years	68952	100	64,21	3,81	4,37	5,02	3,19	1,98
29 years	68157	100	66,72	3,66	4,19	4,01	2,74	1,52

\* Part-time employment is defined here as settled working hours/ usual working hours less than 30 h per week.

Source: Statistics Norway.

## ANNEX II: UPPER SECONDARY EDUCATION

Annex II , Figure 1.



# TO OBTAIN UNIVERSITY ENTRANCE QUALIFICATIONS

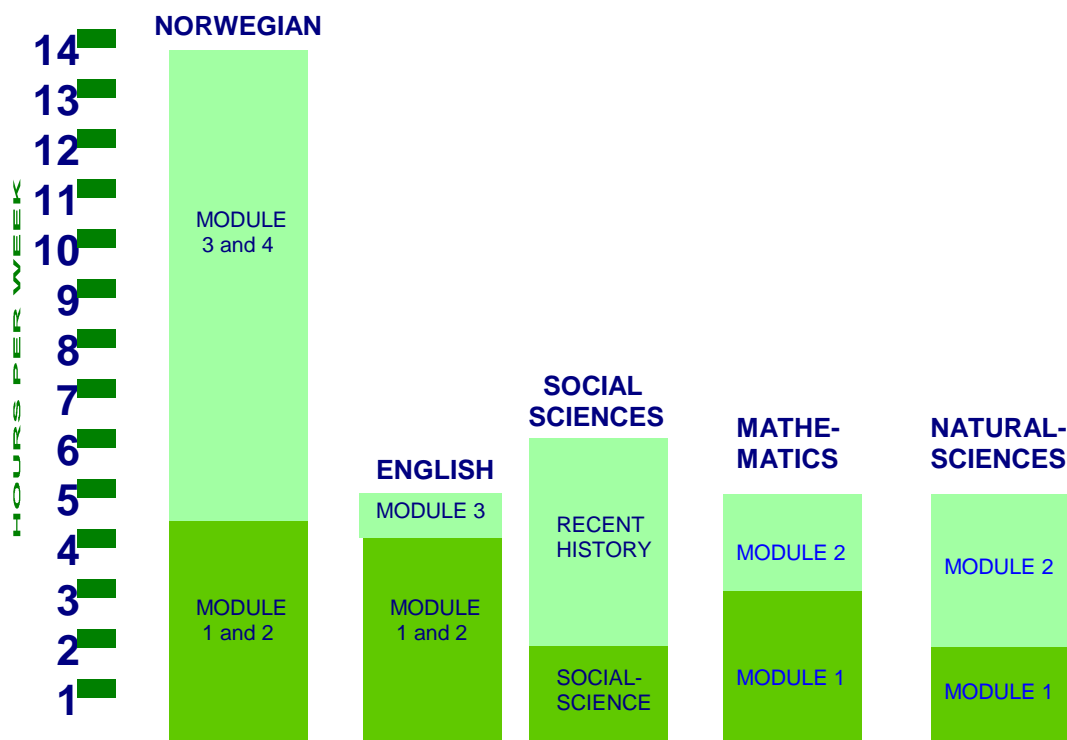
(apprentices and holders of journeyman's and craft

## Alternative 1

After completing 2 years at school (foundation course and advanced course I), apprentices attending a vocational area of study may attend an advanced course II consisting of general subjects, building on the general subjects of the two first years in order to gain full matriculation qualifications.

## Alternative 2

After obtaining a journeyman's or craft certificate, it is possible to gain full matriculation qualifications by taking extra modules in the subjects Norwegian, English, Social Sciences, Mathematics and Natural Sciences.

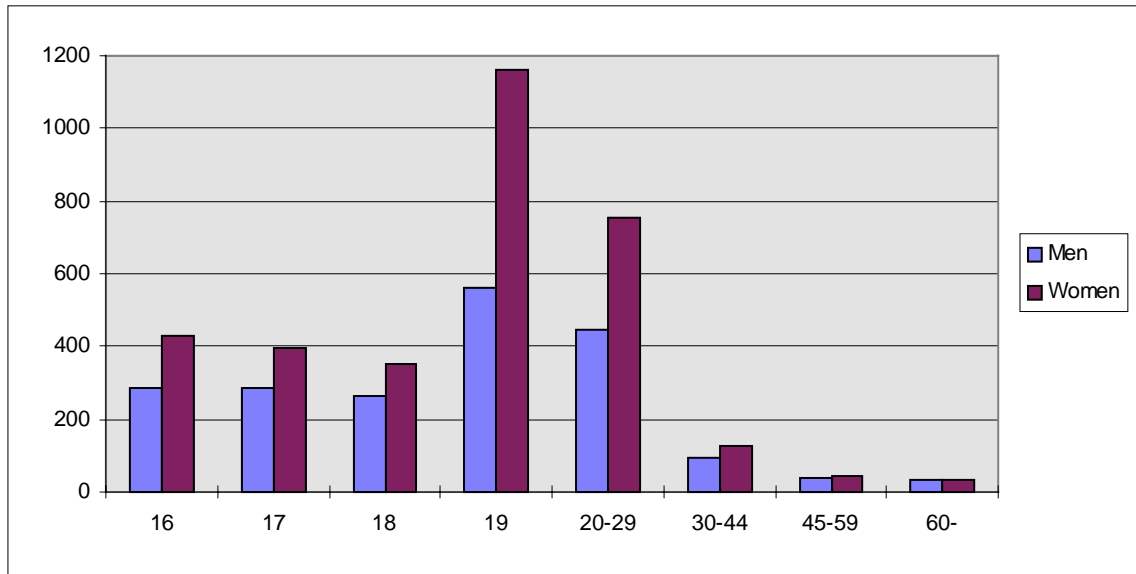


A module is the documented partial competence within a single subject

- Modules within an area of study resulting in vocational competence
- Additional modules to be taken in order to obtain university entrance qualifications

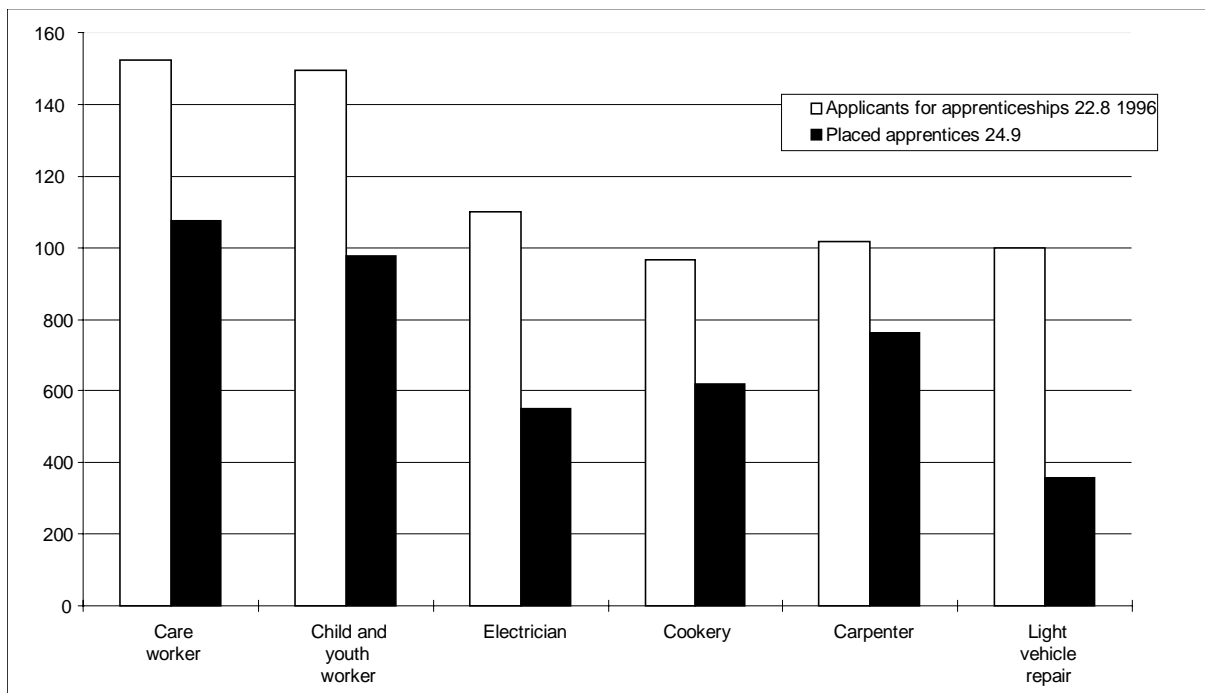
**Annex II, figure 3**

**Number of pupils in the Folk high school arranged according to age and gender (96/97):**



Source: Ministry of Education, Research and Church Affairs

**Annex II, figure 4. Five trades where there is a significant lack of apprenticeship places**



Source: Ministry of Education, Research and Church Affairs.

Ministry of Education, Research and Church Affairs - Evaluation of Reform 94 - Research Institutions

Annex II, table 1

<b>“The integrated human being”</b>					
<b>The spiritual human being</b>	<b>The creative human being</b>	<b>The working human being</b>	<b>The liberally-educated human being</b>	<b>The social human being</b>	<b>The environmentally aware human being</b>
<ul style="list-style-type: none"> <li>• Familiarity with Christian and humanistic values</li> <li>• Awareness of cultural heritage, identity and local traditions</li> <li>• Meet other cultures openly</li> <li>• Respect for and knowledge of other religions and faiths</li> </ul>	<ul style="list-style-type: none"> <li>• Develop creative abilities and critical sense</li> <li>• Find new solutions to problems</li> <li>• Scientific thinking and methods: -The ability to wonder, to pose new questions, to invent possible explanations and to test one’s explanations</li> </ul>	<ul style="list-style-type: none"> <li>• Learning and work habits</li> <li>• learning to learn</li> <li>• responsibility for own learning</li> <li>• plan and organise own work and learning process</li> </ul>	<ul style="list-style-type: none"> <li>• A sound foundation of knowledge and broad frames of reference</li> <li>• The ability to organise knowledge</li> <li>• Methodological skills</li> <li>• Respect for facts and sound argument</li> <li>• Familiarity in using information technology</li> <li>• Internationalisation and appreciation of tradition</li> <li>• The ability to acquire and attain new knowledge</li> <li>• entrepreneurial skills</li> </ul>	<ul style="list-style-type: none"> <li>• Trust in own abilities</li> <li>• Communication abilities</li> <li>• Co-operation, team-work</li> <li>• Solving conflicts</li> <li>• Social responsibility</li> <li>• Concern for others</li> <li>• Know rights and duties</li> <li>• Take responsibility</li> <li>• Develop independent and autonomous personality</li> </ul>	<ul style="list-style-type: none"> <li>• Joy of nature and physical activity</li> <li>• Awareness of nature</li> <li>• Awareness of environment and conflicts of interest</li> </ul>

**Annex II, Table 2. Pupils in upper secondary education by age on 1 October 1996.**

Subject area/Age	<-16>	<17>	<18>	<19>	<20>	<21-25>	<26->	Total
General and Business Studies.	23 915	23 062	25 189	4 795	1 424	2 321	2 453	83 158
Music, Dance and Drama.	1 277	1 196	1 082	147	38	43	11	3 794
Sports and Physical Education.	1 982	1 799	1 685	254	58	39	11	5 829
Total General Subjects.	27 174	26 057	27 957	5 196	1 520	2 403	2 475	92 782
Health and Social Studies.	4 672	5 260	3 015	1 256	782	1 835	2 306	19 126
Agriculture, Fishing and Forestry.	1 177	1 201	1 091	398	242	460	294	4 864
Arts, Crafts and Design Studies.	3 451	3 111	1 903	542	270	515	472	10 264
Hotel and Food-Processing Trades.	2 334	2 409	1 007	331	172	335	222	6 810
Building and Construction Trades.	1 737	1 871	539	190	105	195	145	4 782
Technical Building Trades.	532	605	317	140	73	213	149	2 030
Electrical Trades.	3 362	3 120	1 739	309	134	323	175	9 162
Engineering and Mechanical Trades.	4 078	3 849	2 235	737	330	501	332	12 062
Chemical and Processing Trades.	340	282	43	24	25	83	52	849
Woodworking Trades.	305	338	159	67	43	159	181	1 252
Total Vocational Subjects.	21 988	22 047	12 049	3 995	2 175	4 619	4 328	71 201
Other.	928	1 216	1 160	1 406	1 038	3 614	4 939	14 300
Total.	50 090	49 320	41 166	10 597	4 734	10 636	11 741	178 283

Source: Ministry of Education, Research and Church Affairs

**Annex II, table 3. Initial vocational training**

Year	Passed trade examinations		
	Total	§ 20	§ 20
1993	14 830	6 532	44%
1994	15 576	6 372	41%
1995	16 319	6 712	41%

Source: Ministry of Education, Research and Church Affairs, SASA-statistics.

**Annex II, table 4 Apprenticeship contracts 1993-1996**

Year	Current apprenticeship contracts
1993	18,991
1994	21,247
1995	22,657
1996	27,944

Source: Ministry of Education, Research and Church Affairs.

**Annex II, Table 5. Pupils in upper secondary education, general and vocational, per cent of registered population in year class, by age.**

Year/Age	16	17	18	16-18	19-24	25-29
1980	72,1	69,1	54,8	65,5	11,6	2,4
1985	80,0	76,7	62,7	73,2	11,6	2,2
1990	89,6	84,0	74,4	82,5	15,8	3,8
1991	90,6	86,6	77,6	84,7	16,8	4,2
1992	90,9	88,4	80,6	86,4	17,5	4,5
1993	91,5	89,4	81,8	87,4	17,7	4,6
1994	94,1	90,2	82,9	89,0	16,7	4,3
1995	94,1	93,1	83,6	90,3	15,7	3,9

*Note:* Apprentices are not included in these figures. Following changes in the procedures, separate figures for apprenticeship contracts are now being collected. See § 4.1.1.

*Source:* Statistics Norway (1995).

**Annex II, Table 6. Pupils under the Act Concerning Upper Secondary Education, 1st of October.**

	<b>Pupils</b>	<b>Female pupils</b>	<b>Pupils in vocational education</b>	<b>Pupils in private schools</b>
	<b>Total</b>	<b>Per cent of total</b>	<b>Per cent of foundation course</b>	<b>Per cent of total</b>
1976	132 782	47,9	46,4	4,6
1977	136 914	48,1	47,2	5,0
1978	143 434	48,6	48,7	4,6
1985	188 910	51,2	47,3	5,1
1986	183 862	51,0	47,0	5,3
1992	201 873	49,0	45,8	5,3
1994	187 500	48,3	37,5	5,6
1995	181 562	45,5	48,4	5,4
1996 *	178 283	49,7	49,9	4,6

*Note:*

\* Preliminary.

*Source:* The figures from 1976 up to and including 1995 are from Statistics Norway. The figures from 1996 are from the Ministry of Education, Research and Church Affairs. Note: The table shows the total number of pupils at upper secondary level with the proportion of pupils in private schools and of female pupils each year. The proportion of pupils in vocational education is for the first year at school. The choice of subjects pupils make during the first year is the main determinant of whether they continue in vocational or general studies afterwards.

**Annex II, Table 7. Pupils under the Act Concerning Upper Secondary Education, 1st of October, by age.**

	16-19 years old	20-24 years old	Above 24 years old	Total
1978	122 321	14 685	6 428	143 434
1985	158 863	20 551	9 496	188 910
1986	155 610	18 610	9 642	183 862
1992	162 400	25 927	13 546	201 873
1994	153 748	22 161	11 591	187 500
1995	154 145	17 769	9 648	181 562
1996 *	151 172	15 369	11741	178 283

\* Preliminary.

*Source:* The figures from 1976 up to and including 1995 are from Statistics Norway. The figures from 1996 are from the Ministry of Education, Research and Church Affairs.

*Note:* The figures are the Ministry of Education, Research and Church Affairs, i.e. the figures from 1996 for ages 20-25 and 26 and over are based on a somewhat different age distribution than those provided by Statistics Norway. The figures are thus not directly comparable.

**Annex II, table 8. Technical schools  
Pupils attending technical schools.**

Year	1990	1991	1992	1993	1994	1995	1996
Pupils	7422	7591	7971	7488	6672	5423	4919

*Source:* The Ministry of Education, Research and Church Affairs.

## **Annex II, table 9.**

### 1. Norwegian Institute for Studies in Research and Higher Education

Its main task is to study through-flow and qualifications, mainly of the first pupils (cohort) from their start at Foundation Course, to Advanced Course I and Advanced Course II/Workplace level.

The institute is also concerned with applicants with Norwegian as their second language.

### 2. Lillehammer College

Lillehammer College evaluates the curriculum and the support system that exists in connection with the reform.

### 3. Work Research Institute

This project concerns organisation and co-operation between different educational authorities at all levels.

### 4. Multidisciplinary Group for the Study of Work and Society - University of Bergen

This group regards the organisation of the vocational training and the content of the vocational education.

### 5. Møre Research

Møre Research pay especially attention to applicants with recognised need for special education.

### 6. Norwegian Institute of Adult Education

The educational reform is first and foremost a reform for pupils aged 16 -19 years. Despite this, the Ministry is concerned about the situation for older applicants for education.

### 7. FAFO- Institute for Applied Social Science

FAFO focuses the following-up service.

## **ANNEX II, APPENDIX I: MAIN AGENCIES DEALING WITH VOCATIONAL TRAINING AT UPPER SECONDARY LEVEL**

Because vocational training is of essential importance for the working community, concerning working conditions, productivity and profitability, the employers' and employees' organisations have considerable influence on vocational training at the upper secondary level. They have representatives in many of the agencies involved, such as the National Council for Vocational Training (RFA), the training councils(OR), the vocational training committees and the examination boards.

### *National Council for Vocational Training*

The National Council for Vocational Training (RFA) was set up in 1981 upon the implementation of the vocational training act. It had both administrative and advisory functions. With Reform 94, the council became a purely advisory body to the ministry on the major questions related to vocational training. The administrative tasks were subsumed into the ministry and the vocational advice concerning individual trades for the most part now goes directly between the training councils and the ministry. The secretariat functions of the RFA are taken care of by the Ministry.

### *The Training Councils*

Norway has 20 national advisory bodies with representatives from the social partners which provide vocational advice concerning individual trades, namely the training councils (opplæringsrådene). These are nominated according to the same principle as the RFA, but here it is the countrywide branch organisations which propose the social partners' members. The ministry nominates the remainder without outside advice.

The tasks of the training councils are related to the trades for which they are responsible. The work includes drawing up final qualifications for trades and they participate in curriculum development. They also take the initiative in matters concerned with vocational training within their spheres of responsibility at school and in working life, submit expert opinions on matters such as the recognition of previous school attendance and experience, advise on the recognition of foreign education, draw up papers for the theoretical part of examinations for section 20 candidates, draw up guidelines for the practical part of the examinations, and at the same time generally provide advice and expert opinion to the ministry on their respective trades. Another important field of activity is the development of trades themselves, both to prepare final qualifications for new trades and to change existing trades.

### *Vocational Training Committees*

In every county, the county authorities nominate a vocational training committee. The committee, which is set up with representatives of the social partners and is an advisory body to the county, bears a major responsibility for implementing vocational training on behalf of the county authorities.

Important tasks are to ensure that the provisions of the vocational training act are followed, to arrange apprenticeship places and to place pupils in training establishments. The committees approve the training establishments and supervise the training in the establishments. The committees have the authority to withdraw the right to have apprentices from an establishment. Furthermore, they are responsible for approving the apprenticeship contracts, for ensuring that the trade and journeyman's examinations are held in accordance with the conditions, for appointing the examination boards and for issuing trade and journeyman's certificates. The vocational training committees also evaluate the theoretical and practical grounding of the section 20 candidates and approve it, if appropriate.

Upon the introduction of Reform 94, the vocational training committees were assigned a new, important and extensive task, namely responsibility for assigning apprentices to enterprises. This made it necessary for the committees to work actively with the branch organisations and enterprises to draw up needs analyses and overviews of available apprenticeship places.

The vocational training committees are nominated for a period of four years and follow the same electoral cycle as the county council. The social partners in the county propose four of the seven members of the committees, two from each side. In addition, three members are nominated by the county, one apprentice and two with respective backgrounds in business/employment work and schools. The leader of the committee is chosen for a two-year period at a time. The vocational training committee has a secretariat that carries out the day-to-day work of the committee. It has regular contact with the training establishments and can provide expert advice and assistance in practical matters. Normally, the administration of the committees is integrated into the county's education service and placed under the county schools officer.

#### *Examination boards*

The trade and journeyman's examinations are evaluated by examination boards. In principle, each county has an examination board for each trade. If necessary, several can be nominated. In some cases, the counties cooperate on joint boards, for example, for the small trades.

The tasks of the boards are to organise and manage the implementation of the practical side of the trade examination and evaluate the results. The boards' main task is the work with the trade examination but they can also be used as a vocational committee, i.e. as an advisory body for the county on questions relating to the respective trades. Normally, the vocational training committees use them as advisors on vocational questions related to the approval of training establishments, to supervise enterprises, to evaluate experience, etc.

Until autumn 1996, the boards included representatives from the social partners, i.e. like the appeals boards, they had three members. Upon the implementation of Reform 94, the number of members on the appeals boards was reduced to two. Both members shall have formal vocational competence and ideally also work experience in the relevant trade.

#### *Appeals boards*

A candidate who has failed the trade or journeyman's examination may appeal the decision of the examination board. The appeal is decided by an appeals board for the relevant trade. In certain trades, there is such a range of different examinations that several appeals boards are needed.

The appeals boards have three members, one from the employers' side and one from the employees' side as well as one who most frequently has a background of teaching the trade in school. They are nominated for four years at a time by the ministry through its National Examination Board (Eksamenssekretariatet). The training council for the trade proposes the members of the appeals board

for the trade. The appeals board may either reverse the decision of the examination board or reject the appeal.

Appeals against the way a matter is handled and formal errors are dealt with by the county authorities on the basis of the Public Administration Act.

### *Vocational Committees*

The vocational training committee can appoint vocational committees, i.e. bodies that can assist the vocational training committee and training establishments with expert advice at different vocational areas. As stated above, the counties may also use the appeals boards as advisory vocational bodies.

## ANNEX II, APPENDIX II: CAPACITY AND NUMBER OF PUPILS

**Table 1 Pupils in upper secondary education, general and vocational, per cent of registered population in year class, by age.**

Year/Age	16	17	18	16-18	19-24	25-29
1980	72,1	69,1	54,8	65,5	11,6	2,4
1985	80,0	76,7	62,7	73,2	11,6	2,2
1990	89,6	84,0	74,4	82,5	15,8	3,8
1991	90,6	86,6	77,6	84,7	16,8	4,2
1992	90,9	88,4	80,6	86,4	17,5	4,5
1993	91,5	89,4	81,8	87,4	17,7	4,6
1994	94,1	90,2	82,9	89,0	16,7	4,3
1995	94,1	93,1	83,6	90,3	15,7	3,9

*Note:* Apprentices are not included in these figures. Following changes in the procedures, separate figures for apprenticeship contracts are now being collected. See § 4.1.1.

*Source:* Statistics Norway (1995).

**Table 2 Pupils under the Act Concerning Upper Secondary Education, 1st of October.**

	<b>Pupils</b>	<b>Female pupils</b>	<b>Pupils in vocational education</b>	<b>Pupils in private schools</b>
	<b>Total</b>	<b>Per cent of total</b>	<b>Per cent of foundation course</b>	<b>Per cent of total</b>
1976	132 782	47,9	46,4	4,6
1977	136 914	48,1	47,2	5,0
1978	143 434	48,6	48,7	4,6
1985	188 910	51,2	47,3	5,1
1986	183 862	51,0	47,0	5,3
1992	201 873	49,0	45,8	5,3
1994	187 500	48,3	37,5	5,6
1995	181 562	45,5	48,4	5,4
1996 *	178 283	49,7	49,9	4,6

\* Preliminary.

*Source:* The figures from 1976 up to and including 1995 are from Statistics Norway. The figures from 1996 are from the Ministry of Education, Research and Church Affairs. *Note:* The table shows the total number of pupils at upper secondary level with the proportion of pupils in private schools and of female pupils each year. The proportion of pupils in vocational education is for the first year at school. The choice of subjects pupils make during the first year is the main determinant of whether they continue in vocational or general studies afterwards.

Annex II, appendix II, table 3.

Statistical Yearbook of Norway 1997

**Pupils going from lower secondary school to upper secondary education.  
Per cent**

County of lower secondary school	Pupils who finished lower secondary school still in education 1 October same year						
	1991	1992	1993	1994	1995 Both sexes	Boys	Girls
<b>The whole country</b>	<b>95,1</b>	<b>95,3</b>	<b>95,5</b>	<b>96,9</b>	<b>96,7</b>	<b>96,6</b>	<b>96,8</b>
Østfold	95,8	96,6	97,0	97,5	95,1	95,1	95,1
Akershus	95,3	95,3	96,1	96,6	97,0	96,5	97,5
Oslo	92,7	..	94,9	94,1	94,9	94,9	95,0
Hedmark	96,1	96,7	96,1	97,1	97,5	97,9	97,0
Oppland	97,2	96,2	97,9	97,7	97,7	97,7	97,6
Buskerud	96,4	95,6	96,6	96,5	96,5	96,7	96,2
Vestfold	96,6	96,7	95,4	96,9	96,9	96,7	97,2
Telemark	92,1	96,1	94,1	98,1	98,1	98,3	97,9
Aust-Agder	95,4	94,2	93,3	95,5	96,6	96,7	96,4
Vest-Agder	96,0	95,2	96,3	97,1	96,9	98,1	95,6
Rogaland	93,9	95,3	94,3	97,5	97,4	97,7	97,0
Hordaland	94,9	94,3	95,3	98,1	96,9	97,2	96,7
Sogn og Fjordane	97,2	96,7	96,1	97,6	97,7	97,3	98,1
Møre og Romsdal	96,0	95,7	96,6	97,7	96,3	95,1	97,5
Sør-Trøndelag	96,5	96,9	96,9	98,5	98,6	98,3	98,8
Nord-Trøndelag	97,1	97,6	97,2	98,6	97,8	97,8	97,8
Nordland	94,0	93,9	93,9	96,9	96,6	95,8	97,3
Troms	94,9	93,4	95,1	97,0	96,4	95,9	97,0
Finnmark	86,4	89,1	88,5	90,2	91,7	89,1	94,7

Source: NOS Education Statistics Primary and Lower Secondary Schools 1995.  
More information: Division for Population and Education Statistics.

Annex II, appendix II, table 4.

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Adult education organised by popular education organisations. Number of participants by sex and organisation

Popular education organisation	Participants			Of which females		
	1994	1995	1996	1994	1995	1996
<b>Total</b>	<b>753 094</b>	<b>769 108</b>	<b>743 808</b>	<b>419 238</b>	<b>428 663</b>	<b>413 933</b>
Arbeidernes opplysningsforbund i Norge	151 822	162 437	142 239	86 299	93 409	80 246
Bygdefolkets Studieforbund	45 767	33 762	31 690	12 998	11 156	10 430
Høyres Studieforbund	17 924	18 422	17 326	11 310	11 422	10 095
Noregs Ungdomslag	18 209	15 930	14 092	10 382	9 127	7 923
Norges Husflidslag	14 570	13 946	14 195	12 651	12 550	12 533
Studieforbundet Populus <sup>1</sup>	10 069	8 297	11 321	8 497	7 504	10 200
Idrettens Studieforbund <sup>2</sup>	31 783	40 538	38 118	12 362	15 710	15 036
Norges Røde Kors	11 675	10 367	7 194	6 238	5 648	3 937
Norsk Musikkråds studieforbund <sup>3</sup>	157 742	167 657	173 945	86 393	91 236	94 766
Norsk Kristelig Studieråd	50 739	42 786	43 732	30 708	25 703	26 134
Studieforbundet Folkeuniversitetet	102 674	106 927	98 170	68 015	70 929	64 686
Studieforbundet Natur og Miljø	20 137	21 657	22 502	6 865	8 030	8 280
Studieforbundet Ny Verden	9 532	9 297	8 022	5 784	5 413	4 603
Yrkesorganisasjonenes Studieforbund	7 337	9 606	10 454	5 915	7 144	8 227
Other popular education organizations	103 114	107 479	110 808	54 821	53 682	56 837

<sup>1</sup> Named Norges Husmorforbund before 1 January 1995.

<sup>2</sup> Named Norges Idrettsforbund before 1 January 1995.

<sup>3</sup> Named Norges Sang- og Musikkråd before 1 January 1995.

Source: The Norwegian Association for Adult Education and The Ministry of Education, Research and Church Affairs.

More information: Division for Population and Education Statistics.

**Annex II, appendix III: Through-flow**

**Table 1. Elever som avsluttet 9. klasse i grunnskolen våren 1995, etter hvor de var i utdanning høsten samme år. Prosent. Pupils who finished compulsory education in spring 1995, by type of education in autumn the same year. Per cent.**

Bostedsfylke County of residence	I alt (=100 prosent) Total (=100 per cent)	Utdanning 1. oktober 1995 Education 1 October 1995			Ikke i utdanning 1. oktober 1995 Not in ed. 1 October 1995
		Utdanning under lov om videre- gående opplæring Education under the Upper Secondary Education Act		Annen utdan- ning Other edu- cation	
		Allmennfaglig studieretning General area of study	Yrkesfaglig studieretning Vocational area of study		
Hele landet The whole country .....	52133	52,5 1)	42,5	1,7	3,3
Østfold .....	2902	46,5	47,5	1,1	4,9
Akershus .....	5213	62,3	33,5	1,1	3,0
Oslo .....	3604	61,7	32,0	1,2	5,1
Hedmark .....	2160	48,7	48,5	0,3	2,5
Oppland .....	2168	50,4	46,7	0,6	2,3
Buskerud .....	2585	53,4	41,4	1,7	3,5
Vestfold .....	2585	57,6	37,9	1,4	3,1
Telemark .....	2033	52,0	45,4	0,8	1,9
Aust-Agder .....	1402	50,9	44,4	1,3	3,4
Vest-Agder .....	2044	51,7	44,3	0,8	3,1
Rogaland .....	4882	49,4	46,8	1,1	2,6
Hordaland .....	5400	50,1	45,1	1,8	3,1
Sogn og Fjordane .....	1438	54,5	39,9	3,3	2,3
Møre og Romsdal .....	3319	49,6	42,3	4,4	3,7
Sør-Trøndelag .....	3007	52,9	43,6	2,0	1,4
Nord-Trøndelag .....	1705	47,3	47,3	3,2	2,2
Nordland .....	3073	49,7	44,8	2,1	3,4
Troms .....	1687	48,1	46,7	1,6	3,6
Finnmark .....	855	48,7	39,2	3,9	8,3
Uoppgitt og utlandet Unknown and foreign countries ....	71	23,9	14,1	1,4	60,6

1) Omfatter grunnkurs for allmenne, økonomiske og administrative fag, musikk, dans og drama og idrettsfag.

1) Comprising general and business studies, music, dance and drama and sports and physical education.

Source: Statistics Norway.

**Annex II, appendix III, table 2. Elever under lov om videregående opplæring, som fullførte et videregående kurs I våren 1995, etter hvilken studieretning de fullførte og ny utdanning høsten 1995. Prosent.**

**Pupils under the Upper Secondary Education Act, who completed an advanced course I in spring 1995, by type of education completed and by education in autumn 1995. Per cent**

Utdanningens art (studieretning) våren 1995 Type of education (area of study) spring 1995	I alt (=100 prosent) Total (=100 per cent)	I utdanning 1. oktober 1995 In education 1 October 1995					Ikke i ut- danning 1. oktober 1995 Not in education 1 October 1995
		Grunn- kurs Basic courses	Videregå- ende kurs I Advanced course I	Videregående kurs II Advanced course II	Lærling I annen Appren- tices Other education		
I alt Total .....	28613	1,2	3,8	46,8	8,6	4,6	35,1
HE-Husflidsfag og este- tiske fag Homecrafts and aesthetic subjects .....	654	5,8	15,6	14,7	-	16,8	47,1
HK-Handels- og kontor- fag Commercial subjects .....	6868	0,7	1,0	87,9	0,1	1,0	9,3
HI-Håndverks- og industri- fag Craft and industry .	11028	1,3	4,9	38,2	17,1	6,8	31,6
FS-Fiskeri- og sjøfarts- fag Fishery science and maritime studies .....	503	0,2	6,8	52,7	2,4	7,6	30,4
LF-Landbruksfag og natur- bruk Agrivocational subjects .....	1433	0,3	1,5	81,4	1,1	2,0	13,6
HS-Helse- og sosialfag Health education and social studies .....	5231	0,6	2,9	22,5	0,5	3,9	69,6
HH-Husholdningsfag Domestic science (home economics) .....	2896	2,1	5,8	14,4	17,4	4,0	56,3

Source: Statistics Norway

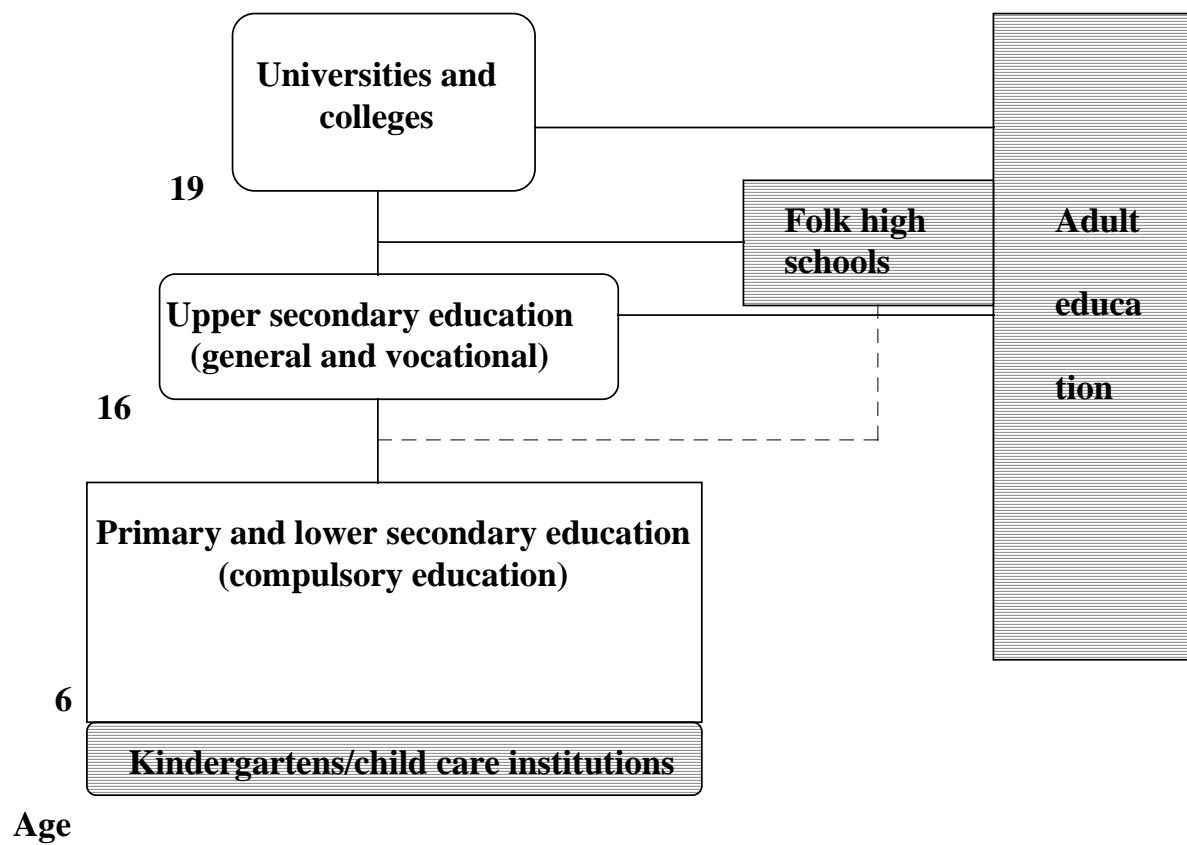
**Annex II, appendix III, table 3. Elever under lov om videregående opplæring, som fullførte et videregående kurs II våren 1995, etter hvilken studieretning de fullførte og ny utdanning høsten 1995. Prosent**  
**Pupils under the Upper Secondary Education Act, who completed an advanced course II in spring 1995, by type of education completed and by education in autumn 1995. Per cent**

Utdanningens art (studieretning) våren 1995 Type of education (area of study) spring 1995	I alt (=100 prosent) Total (=100 per cent)	I utdanning 1. oktober 1995 In education 1 October 1995					Ikke i ut- danning 1. oktober 1995 Not in education 1 October 1995
		Grunn- kurs Basic courses	Lær- linger Appren- tices	Annen videre- gående utdann. Other secon- dary education	Høgskoler Colleges of higher edu- cation	Univer- siteter Univer- sities	
I alt Total .....	43051	1,0	2,4	14,5	13,6	13,5	55,0
AF-Allmenne fag General subjects .....	25298	1,3	0,2	13,0	15,6	21,0	48,9
HE-Husflidsfag og este- tiske fag Homecrafts and aesthetic subjects .....	951	0,6	0,3	16,7	9,3	12,4	60,7
HK-Handels- og kontor- fag Commercial subjects .....	7494	0,7	0,3	14,9	17,7	3,8	62,7
HI-Håndverks- og industri- fag Craft and industry .	4945	0,3	18,7	15,2	1,1	0,2	64,5
FS-Fiskeri- og sjøfarts- fag Fishery science and maritime studies .....	865	-	3,5	38,0	1,0	-	57,5
LF-Landbruksfag og natur- bruk Agrivocational subjects .....	1191	0,6	0,7	27,0	2,9	0,6	68,2
HS-Helse- og sosialfag Health education and social studies .....	1443	0,3	0,4	9,2	21,6	1,0	67,4
HH-Husholdningsfag Domestic science (home economics) .....	58	-	17,2	6,9	1,7	-	74,1
IF-Idrettsfag Sports and physical education .....	806	0,9	-	16,7	9,2	8,4	64,8

Source: Statistics Norway

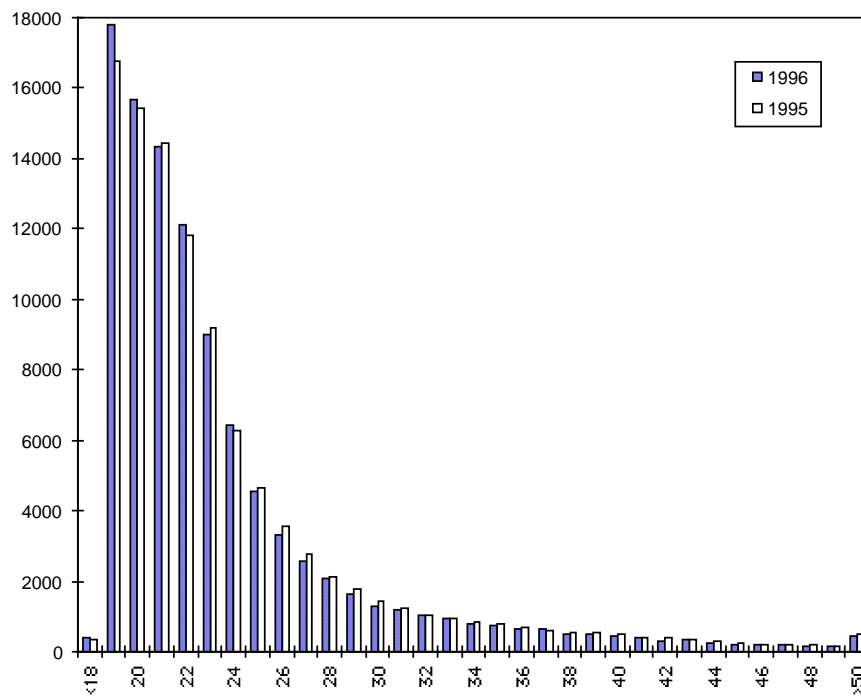
**ANNEX III: HIGHER EDUCATION IN NORWAY**

**Figure 1. A broad description of the paths from primary education to higher education**



**Annex III, Figure 2**

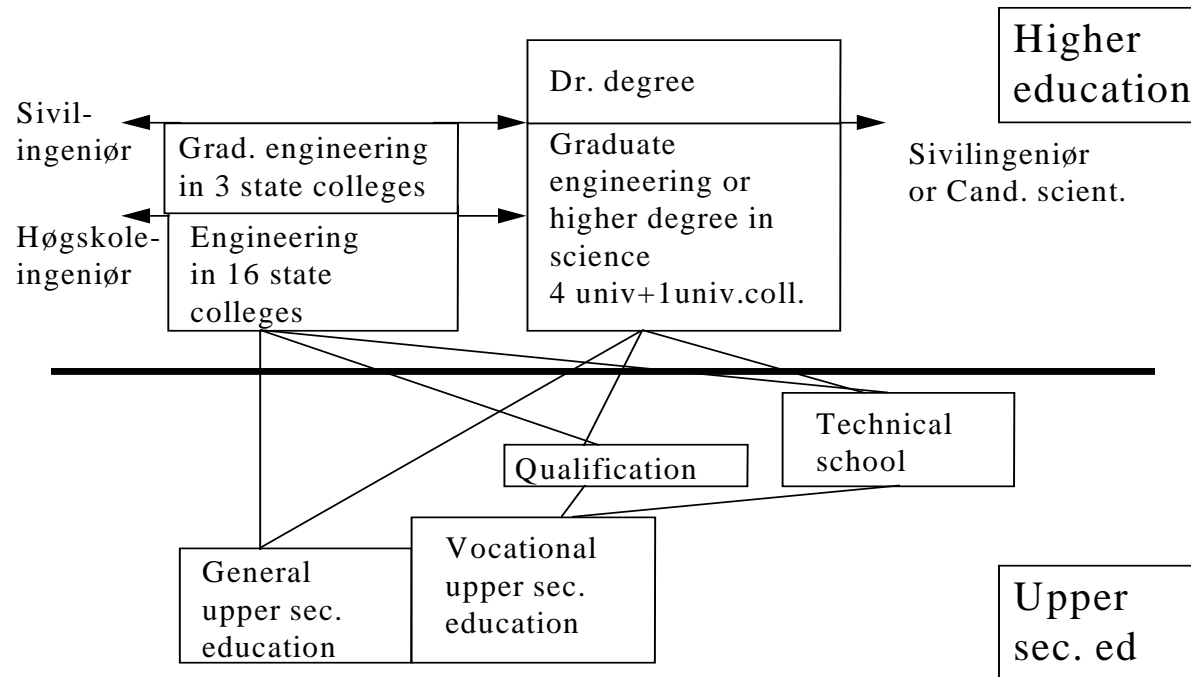
**Norway: Applicants to higher education by age**



*Source:* Universities and Colleges Admission Services (“Samordna opptak”)

**Annex III, figure 3. From upper secondary education to engineering colleges**

As an illustration of the recent efforts to create an education and training system without dead ends, the diagram below shows the relationship between upper secondary education, higher education and Network Norway within technical and scientific subjects, at all levels. The thick line shows the transition between upper secondary and higher education while the arrows show the paths to the possible qualifications.



**Annex III, table 1. Number of applicants to higher education and total year cohorts aged 19**

	1992	1993	1994	1995	1996	1997
Number of applicants aged 19	16 487	17 377	17 248	16 749	17 797	14 175
Year cohorts aged 19 <sup>1</sup>	61 208	59 603	56 345	53 474	50 877	51 749
Percent of the cohorts applying for higher education	26,94	29,15	30,61	31,32	34,98	27.39

<sup>1</sup> Number of living born in relevant year cohorts.

Source: Statistics Norway ('Statistisk årbok').

**Annex III, table 2. Number of students in higher education by gender and by discipline**

The number of students according to gender as of 1 October each year in the period 1993 to 1995

Total			Men			Women		
1993	1994	1995	1993	1994	1995	1993	1994	1995
165 942	169 306	176 745	75 654	76 086	78 164	90 288	93 220	98 581

Source: Statistics Norway.

**Annex III, table 3 Number of students**

The figures are provided by Statistics Norway (Statistisk sentralbyrå) and concern the number of students according to gender, sector, and institution as of 1 October each year in the period 1993 to 1995

Sector and institution	Total			Men			Women		
	1993	1994	1995	1993	1994	1995	1993	1994	1995
Total	165942	169 306	176 745	75 654	76 086	78 164	90 288	93 220	98 581
University sector in all	77 027	79 509	82 957	36 714	37 788	39 225	40 313	41 721	43 732
State	76 329	78 852	82 379	36 360	37 436	38 911	39 969	41 416	43 468
Total Colleges	88 915	89 797	93 788	38 940	38 298	38 939	49 975	51 499	54 849
State Colleges		70 670	73 678		28 273	28 487		42 397	45 191
Private higher educ. inst.		16 431	17 368		8 380	8 785		8 051	8 583

**Annex III, table 4 Students at the ‘university colleges’**

<b>Institution</b>	<b>Registered students 1995</b>
Norwegian School of Economics and Bus. Administration	2 566
Oslo School of Architecture	295
Norwegian College of Physical Education and Sport	579
Norwegian State Academy of Music	478
Norwegian College of Veterinary Medicine	325
Norwegian College of Agriculture	2 132
<b>Total</b>	<b>6 375</b>

*Source:* DBH, Database for Higher Education.

**Annex III, table 5a Students at state colleges and arts & crafts colleges**

<b>Distribution by type of study at state colleges</b>	<b>Registered students 1995</b>
General teacher education	8 539
Pre-school teacher education	5 757
Vocational teacher education	1 334
Programme for librarians	217
Laboratory Technology	643
Training for interpreters for the deaf	14
Occupational Therapy	515
Programme for child welfare workers	1 764
Audiography	19
Physiotherapy	795
Examen Philosophicum (cf. note 1 universities)	977
Graduate studies	416
Engineering, 3-year programme	8 363
Engineering, 2-year graduate programme	774
Journalism	374
Maritime studies	476
Programme in Prosthetics and Orthotics	11
Educational theory and practice (cf. note 2 universities)	489
Radiography	298
Programme for dispensers	93
Business Administration, 4-year programme	467
Social work education	1 887
Nursing	8 556
Dental hygiene	23
Training for social educators	1 478
½ and 1-year programmes in 'traditional university subjects' (for the 'cand. mag.' degree)	12 961
Other vocationally oriented studies (for the degree 'høgskolekandidat')	11 473
<b>Total state colleges</b>	<b>68 713</b>
<b>Arts and crafts, including performing arts</b>	<b>813</b>

Source: DBH, Database for Higher Education.

**Annex III, table 5b Enrolment in private higher education by main categories of studies:**

<b>Category:</b>	<b>Registered students 1994</b>	<b>Registered students 1995</b>
Health and Social Work Education	1 950	2 182
Theological and Pedagogical Education	2 270	2 256
Business studies, Computer Technology, Engineering	9 378	9 142
<b>Total</b>	<b>13 598</b>	<b>13 580</b>

**Annex III, table 6 Enrolment in private higher education by main categories of studies:**

<b>Category:</b>	<b>Registered students 1994</b>	<b>Registered students 1995</b>
Health and Social Work Education	1 950	2 182
Theological and Pedagogical Education	2 270	2 256
Business studies, Computer Technology, Engineering	9 378	9 142
<b>Total</b>	<b>13 598</b>	<b>13 580</b>

**Annex III, table 7 Enrolment according to discipline and type of institution: Universities**

<b>Discipline</b>	<b>Registered students 1995</b>
Medicine	3 368
Nursing science/health education	449
Dentistry	595
Natural sciences	10 805
Pharmacy	347
Engineering, 5-year programme	6 994
Architecture	326
Humanities	15 707
Social sciences	14 116
Psychology	2 965
Law	7 763
Theology	382
Examen philosophicum <sup>1</sup>	7 946
Educational theory and practice <sup>2</sup>	493
Fishery science	503
Others	1 539
<b>Total:</b>	<b>74 298</b>
Private students that are not formally registered	4 445

*Notes:*

<sup>1</sup> A half-year preparatory course in philosophy common to all university students.

<sup>2</sup> A one-year programme in teacher training for university and college graduates.

*Source:* DBH, Database for Higher Education.

**Annex III, table 8. Differences between prescribed and real study periods required before graduation from professional and higher degrees for which the prescribed study periods are of at least 5 years' duration:**

<b>Graduates</b>	<b>1987-1988</b>	<b>1992-93</b>
Humanities (6)	1.32	1.28
Theology (6)	1.11	1.17
Natural Sciences (5)	1.44	1.41
Law (6)	1.20	1.21
Economics (5.5)	1.34	1.37
Psychology (7)	1.17	1.23
Sociology (6)	1.45	1.35
Political Science (6)	1.36	1.35
Education (6.5)	0.94	1.01
Other Social Sciences (6)	1.26	1.32
Odontology (5)	1.09	1.17
Veterinary Medicine (5.5)	1.13	1
Pharmacy (5)	1.07	1.2
Engineering (4.5)	1.21	1.23
Architecture (5.5)	1.10	1.13
Agricultural Sciences (5) <sup>1</sup>	0.95	0.99
Medicine (6)	1.23	1.24
Total Average (weighed)	1.22	1.24

*Note:*

<sup>1</sup> For the graduates concerned by the survey, the first year could be taken in schools that are not considered as higher education institutions.

*Source:* Tore Naset: Utdanningsvekst og kandidatproduksjon, NIFU, U-notat 4/96.

## ANNEX III, ADDENDA: STRUCTURE OF HIGHER EDUCATION

### NORWEGIAN HIGHER EDUCATION DEGREES

#### State colleges:

Shorter, vocationally-oriented study programmes at the state colleges can lead to one of the specific college degrees

- '**høgskolekandidat**' (college graduate), or '**høgskoleingeniør**' (college engineer).

All the state colleges may also confer the '**cand. mag.**' degree for combinations of two or more of these or their other study programmes, on the basis of four years of study (see below, the university sector). Some state colleges in addition have higher degree programmes, mostly in cooperation with universities.

#### The university sector:

The universities offer degree programmes at three levels in the humanities, social and natural sciences:

- The lower university degree, '**cand. mag.**', is normally obtained after 3 1/2 to 4 years of full-time study.
- The higher university degrees in general consists of one and a half to two additional years of study, including the writing of a thesis. They are called:  
'**cand. philol.**' (humanities),  
'**cand. scient.**' (natural sciences),  
'**cand. polit.**' (social sciences).  
'**cand. san.**' (paramedical/health education).

In some subjects, there is an alternative higher degree with a more comprehensive thesis called '**mag.art.**'.

- The doctor's degree programmes, consisting of 3 years of study after completion of the higher degree, lead to the degrees  
'**dr. artium**' (humanities),  
'**dr. scient.**' (natural sciences), and  
'**dr. polit.**' (social sciences).  
There is also a traditional general doctor's degree, '**dr.philos.**'.

In addition, some university faculties and the university colleges offer

- professional degree programmes requiring 4 1/2 to 6 years of study, eg. in agricultural sciences, business administration, economics, psychology, medicine, dentistry, law, engineering, theology,

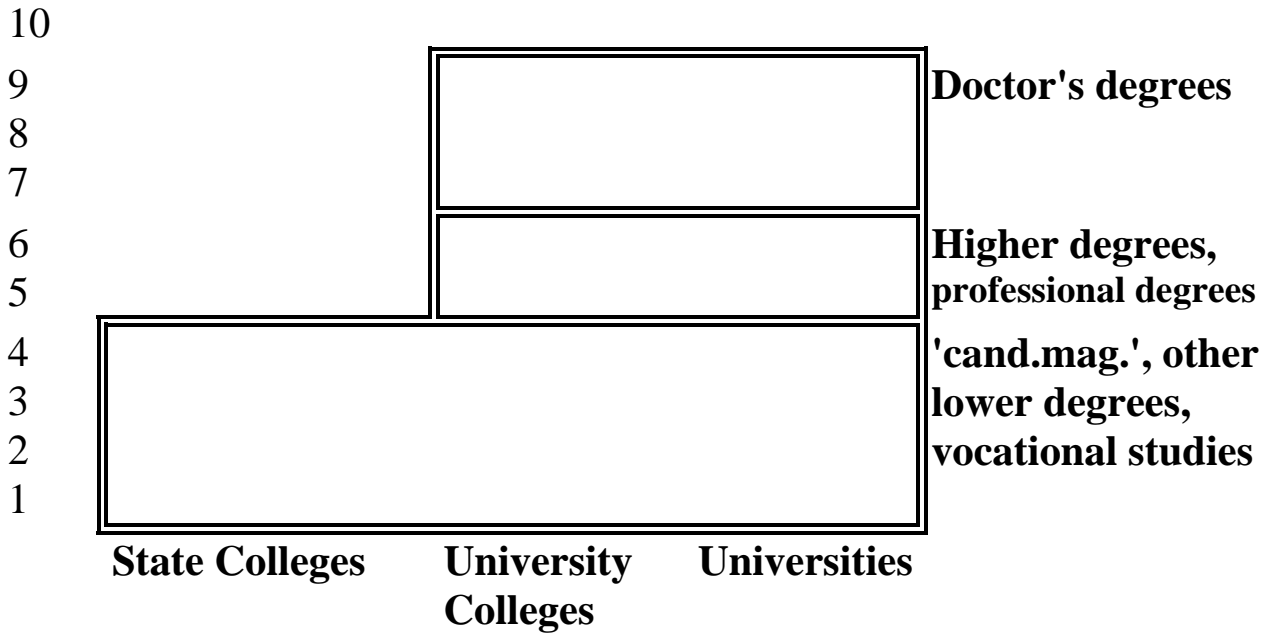
as well as

- 3 years' doctor's degree programmes in these subjects (the exception is dr. oecon.: 2 years).

**Inter-institutional mobility:**

As a means of facilitating and encouraging student mobility between higher education institutions in the country, degrees (most often 'cand.mag.') can be conferred on the basis of studies from a combination of higher education institutions. This system generally implies reciprocal recognition of study programmes between higher education institutions on a time for time basis, and can be illustrated in the following table:

**Years of study**



The main exceptions to this structure concern studies in engineering and in natural sciences, as those programmes are slightly shorter than the others (3 years for 'cand. mag.' and 5 years in all for the higher degrees ('cand. scient.' and 'sivilingeniør')).

## ANNEX IV: ADDITIONAL STATISTICS ON EDUCATION IN NORWAY

### Statistics on upper secondary education (SSB) Statistical Yearbook of Norway 1997

#### Pupils under the Upper Secondary Education Act, by type of course and area of study. 1 October 1995

Area of study	Total	Type of course					
		One-year basic course	Advanced course I	Advanced course II	Technical vocational school	Modified courses	Other courses under the Upper Secondary Education Act
<b>Total</b>	<b>181 562</b>	<b>62 050</b>	<b>59 496</b>	<b>48 838</b>	<b>4 603</b>	<b>4 275</b>	<b>2 300</b>
<b>Area of studies after Reform 94</b>							
General and business studies	57 602	26 987	28 603	-	-	2 012	-
Music, dance and drama	2 527	1 405	1 113	-	-	9	-
Sports and physical education	4 242	2 264	1 976	-	-	2	-
Health and social studies	15 830	7 657	7 483	-	-	690	-
Agriculture, fishing and forestry	3 840	1 776	1 915	-	-	149	-
Arts, craft and design	7 511	4 338	2 995	-	-	178	-
Hotel and food-processing trades	6 532	3 400	2 733	-	-	399	-
Building and construction trades	4 091	2 339	1 651	-	-	101	-
Technical building	1 682	767	896	-	-	19	-
Electrical trades	7 335	3 884	3 449	-	-	2	-
Engineering and mechanical trades	10 905	5 606	4 630	-	-	669	-
Chemical and processing trades	721	438	283	-	-	-	-
Woodworking trades	1 079	569	471	-	-	39	-
<b>Area of studies before Reform 94</b>							
General subjects	29 340	458	627	28 255	-	-	-
Home crafts and aesthetic subjects	1 123	10	22	1 091	-	-	-
Commercial subjects	9 221	23	6	8 556	-	-	636
Craft and industry	11 185	57	226	5 622	4 603	6	671
Fishery science and maritime studies	1 700	14	-	960	-	-	726
Agrivocational subjects	1 577	-	28	1 440	-	-	109
Social science and health education	2 348	58	302	1 833	-	-	155
Domestic sciences	104	-	87	14	-	-	3
Sports and physical education	1 067	-	-	1 067	-	-	-

Source: NOS Education Statistics Upper Secondary Schools.

More information: Division for Population and Education Statistics.

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### Adult education organised by popular education organisations. Number of participants by sex and organisation

Popular education organisation	Participants			Of which females		
	1994	1995	1996	1994	1995	1996
<b>Total</b>	<b>753 094</b>	<b>769 108</b>	<b>743 808</b>	<b>419 238</b>	<b>428 663</b>	<b>413 933</b>
Arbeidernes opplysningsforbund i Norge	151 822	162 437	142 239	86 299	93 409	80 246
Bygdefolkets Studieforbund	45 767	33 762	31 690	12 998	11 156	10 430
Høyres Studieforbund	17 924	18 422	17 326	11 310	11 422	10 095
Noregs Ungdomslag	18 209	15 930	14 092	10 382	9 127	7 923
Norges Husflidslag	14 570	13 946	14 195	12 651	12 550	12 533
Studieforbundet Populus <sup>1</sup>	10 069	8 297	11 321	8 497	7 504	10 200
Idrettens Studieforbund <sup>2</sup>	31 783	40 538	38 118	12 362	15 710	15 036
Norges Røde Kors	11 675	10 367	7 194	6 238	5 648	3 937
Norsk Musikkråds studieforbund <sup>3</sup>	157 742	167 657	173 945	86 393	91 236	94 766
Norsk Kristelig Studieråd	50 739	42 786	43 732	30 708	25 703	26 134
Studieforbundet Folkeuniversitetet	102 674	106 927	98 170	68 015	70 929	64 686
Studieforbundet Natur og Miljø	20 137	21 657	22 502	6 865	8 030	8 280
Studieforbundet Ny Verden	9 532	9 297	8 022	5 784	5 413	4 603
Yrkesorganisasjonenes Studieforbund	7 337	9 606	10 454	5 915	7 144	8 227
Other popular education organisations	103 114	107 479	110 808	54 821	53 682	56 837

<sup>1</sup> Named Norges Husmorforbund before 1 January 1995.

<sup>2</sup> Named Norges Idrettsforbund before 1 January 1995.

<sup>3</sup> Named Norges Sang- og Musikkråd before 1 January 1995.

Source: The Norwegian Association for Adult Education and The Ministry of Education, Research and Church Affairs.

More information: Division for Population and Education Statistics.

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### New students by type of college and age. 1 October 1995<sup>1</sup>

Age	Total	Universities	State colleges	Military colleges	Other colleges of higher education
<b>Total</b>	<b>37 655</b>	<b>14 440</b>	<b>18 167</b>	<b>220</b>	<b>4 828</b>
-18	208	132	55	-	21
19	8 657	4 813	3 100	7	737
20	7 463	3 679	2 862	13	909
21	4 925	2 018	2 196	53	658
22	3 084	940	1 633	36	475
23	2 186	502	1 349	25	310
24	1 374	309	880	10	175
25	982	240	570	7	165
26	844	208	496	8	132
27	766	179	443	7	137
28	606	164	332	2	108
29	547	117	308	3	119
30-34	1 879	369	1 216	8	286
35-	4 134	770	2 727	41	596

<sup>1</sup> New students including all students not previously registered at any of the universities or colleges.  
 Source: NOS Education Statistics Universities and Colleges 1995.  
 More information: Division for Population and Education Statistics.

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### Upper secondary schools. 1 October 1995

Type of school	Pupils		
	Total	Males	Females
<b>Upper secondary education, total</b>	<b>235 501</b>	<b>124 403</b>	<b>111 098</b>
Upper secondary schools	191 178	98 222	92 956
General subjects	84 704	37 968	46 736
Arts, divinity and aesthetic subjects	11 550	3 173	8 377
Teacher training	262	64	198
Commercial and business subjects	14 744	6 738	8 006
Trade, craft and industrial subjects	40 256	35 245	5 011
Transport and communication	4 760	3 224	1 536
Public health	13 709	1 304	12 405
Agricultural, forestry and fishery subjects	5 724	3 588	2 136
Service and military subjects	15 469	6 918	8 551
Folk high schools	5 638	2 416	3 222
Apprentices	19 375	15 192	4 183
Labour market courses	19 310	8 573	10 737

Source: NOS Education Statistics Upper Secondary Schools 1995.  
More information: Division for Population and Education Statistics.

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**Pupils going from lower secondary school to upper secondary education.**  
**Per cent**

County of lower secondary school	Pupils who finished lower secondary school still in education 1 October same year						
	1991	1992	1993	1994	1995 Both sexes	Boys	Girls
<b>The whole country</b>	<b>95,1</b>	<b>95,3</b>	<b>95,5</b>	<b>96,9</b>	<b>96,7</b>	<b>96,6</b>	<b>96,8</b>
Østfold	95,8	96,6	97,0	97,5	95,1	95,1	95,1
Akershus	95,3	95,3	96,1	96,6	97,0	96,5	97,5
Oslo	92,7	..	94,9	94,1	94,9	94,9	95,0
Hedmark	96,1	96,7	96,1	97,1	97,5	97,9	97,0
Oppland	97,2	96,2	97,9	97,7	97,7	97,7	97,6
Buskerud	96,4	95,6	96,6	96,5	96,5	96,7	96,2
Vestfold	96,6	96,7	95,4	96,9	96,9	96,7	97,2
Telemark	92,1	96,1	94,1	98,1	98,1	98,3	97,9
Aust-Agder	95,4	94,2	93,3	95,5	96,6	96,7	96,4
Vest-Agder	96,0	95,2	96,3	97,1	96,9	98,1	95,6
Rogaland	93,9	95,3	94,3	97,5	97,4	97,7	97,0
Hordaland	94,9	94,3	95,3	98,1	96,9	97,2	96,7
Sogn og Fjordane	97,2	96,7	96,1	97,6	97,7	97,3	98,1
Møre og Romsdal	96,0	95,7	96,6	97,7	96,3	95,1	97,5
Sør-Trøndelag	96,5	96,9	96,9	98,5	98,6	98,3	98,8
Nord-Trøndelag	97,1	97,6	97,2	98,6	97,8	97,8	97,8
Nordland	94,0	93,9	93,9	96,9	96,6	95,8	97,3
Troms	94,9	93,4	95,1	97,0	96,4	95,9	97,0
Finnmark	86,4	89,1	88,5	90,2	91,7	89,1	94,7

Source: NOS Education Statistics Primary and Lower Secondary Schools 1995.  
 More information: Division for Population and Education Statistics.

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**Pupils by type of school and age and in per cent of registered population.**  
**1 October 1995**

Age at 31 December 1995	Type of school							Pupils in per cent of registered population		
	Total	Primary and lower secondary schools <sup>1</sup>	Upper secondary schools <sup>2</sup>	Folk high schools	Apprentices	Colleges	Universities	Both sexes	Males	Females
<b>Total</b>	<b>889 482</b>	<b>477 236</b>	<b>210 488</b>	<b>5 638</b>	<b>19 375</b>	<b>93 788</b>	<b>82 957</b>	-	-	-
6	439	439	-	-	-	-	-	0,7	0,6	0,9
7	57 273	57 273	-	-	-	-	-	98,1	97,6	98,6
8	54 541	54 541	-	-	-	-	-	98,8	98,9	98,7
9	53 523	53 523	-	-	-	-	-	99,3	99,2	99,5
10	52 146	52 146	-	-	-	-	-	99,3	99,2	99,3
11	51 503	51 503	-	-	-	-	-	99,2	99,4	99,1
12	51 200	51 200	-	-	-	-	-	99,4	99,4	99,4
13	52 272	52 272	-	-	-	-	-	99,1	98,8	99,5
14	51 909	51 909	-	-	-	-	-	99,0	98,6	99,4
15	52 678	51 901	772	5	-	-	-	100,0	98,9	100,0
16	50 495	529	49 076	840	-	3	-	95,2	94,9	95,5
17	49 669	-	48 988	613	15	7	-	93,3	93,3	93,1
18	44 335	-	42 042	628	1 404	98	133	84,1	83,5	84,7
19	28 789	-	15 199	1 922	2 696	3 994	4 947	52,2	52,3	52,2
20	26 224	-	8 429	599	2 922	7 059	7 202	45,1	42,6	47,8
21	26 473	-	6 082	284	2 585	9 444	8 078	43,0	41,0	45,1
22	25 372	-	4 639	163	2 364	10 290	7 916	40,3	39,9	40,6
23	24 086	-	3 716	98	1 958	10 375	7 939	36,4	36,5	36,3
24	20 259	-	3 062	67	1 357	8 491	7 282	30,1	30,5	29,7
25	15 844	-	2 596	50	916	6 089	6 193	23,8	24,2	23,3
26	12 965	-	2 400	40	653	4 520	5 352	18,5	19,1	17,9
27	10 376	-	2 016	29	430	3 545	4 356	14,9	15,2	14,5
28	8 302	-	1 842	31	322	2 843	3 264	12,1	12,3	11,9
29	6 969	-	1 666	17	253	2 404	2 629	10,1	10,0	10,2
30 -	62 007	-	17 963	252	1 500	24 626	17 666	-	-	-

<sup>1</sup> Age groups are partly estimated.

<sup>2</sup> Including 19 310 in Labour market courses.

Source: NOS Education Statistics 1995.

More information: Division for Population and Education Statistics.

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### Persons 16 years and over, by highest education completed<sup>1</sup>. County. 1995

County	Persons					Per cent			
	Total	Education at the second level, first stage	Education at the second level, second stage	Education at the third level	Unknown or no completed education	Total	Education at the second level, first stage	Education at the second level, second stage	Education at the third level
<b>The whole country</b>	<b>3 474 513</b>	<b>908 087</b>	<b>1 784 193</b>	<b>680 838</b>	<b>101 395</b>	<b>100,0</b>	<b>26,9</b>	<b>52,9</b>	<b>20,2</b>
Østfold	194 989	59 487	101 728	29 571	4 203	100,0	31,2	53,3	15,5
Akershus	344 588	72 136	172 996	89 884	9 572	100,0	21,5	51,6	26,8
Oslo	403 449	79 037	172 755	121 545	30 112	100,0	21,2	46,3	32,6
Hedmark	152 315	51 320	76 171	21 774	3 050	100,0	34,4	51,0	14,6
Oppland	149 315	47 170	77 974	21 365	2 806	100,0	32,2	53,2	14,6
Buskerud	184 979	52 756	96 089	31 357	4 777	100,0	29,3	53,3	17,4
Vestfold	163 723	40 315	89 152	30 621	3 635	100,0	25,2	55,7	19,1
Telemark	131 677	39 006	70 312	19 747	2 612	100,0	30,2	54,5	15,3
Aust-Agder	78 876	19 270	43 308	14 317	1 981	100,0	25,1	56,3	18,6
Vest-Agder	116 719	27 368	64 197	21 541	3 613	100,0	24,2	56,8	19,0
Rogaland	272 172	65 948	147 557	49 621	9 046	100,0	25,1	56,1	18,9
Hordaland	332 605	82 153	173 270	69 363	7 819	100,0	25,3	53,3	21,4
Sogn og Fjordane	84 351	22 191	47 254	13 436	1 470	100,0	26,8	57,0	16,2
Møre og Romsdal	189 716	53 439	102 256	30 813	3 208	100,0	28,7	54,8	16,5
Sør-Trøndelag	204 629	53 424	106 122	40 654	4 429	100,0	26,7	53,0	20,3
Nord-Trøndelag	100 309	27 631	56 299	15 034	1 345	100,0	27,9	56,9	15,2
Nordland	190 983	61 530	97 633	28 588	3 232	100,0	32,8	52,0	15,2
Troms	119 025	35 241	59 288	21 948	2 548	100,0	30,3	50,9	18,8
Finnmark	60 093	18 665	29 832	9 659	1 937	100,0	32,1	51,3	16,6

<sup>1</sup> Figures are based on a uniform classification of vocational education, i.e. irrespective of a person has completed a compulsory school of 7 or 9 years.

Source: NOS Education Statistics.

More information: Division for Population and Education Statistics.

**Annex IV, Table 1. Highest level of educational achievement. Per cent.**

Year/ Årstill	Primary/ Grunnskolenivå	Upper Secondary/ Videregående- e-skole-nivå	University/ Universitets- og høghskolenivå
1988	35,6	49,3	15,1
1989	34,3	50	15,7
1990	33,1	50,3	16,6
1991	32	50,8	17,2
1992	30,9	51,2	17,9
1993	29,7	51,6	18,8
1994	28,7	51,9	19,5
1995	26,9	52,9	20,2

*Note:*

Yrkesutdanning er her nivågruppert uavhengig av om personen har 7-årig folkeskole eller 9-årig grunnskole.

**Annex IV, Table 2. Pupils and students according to type of educational institution/  
Elever og studenter etter skoleslag. Antall**

Year/ Årstall	Primary/ Grunnskoler	Upper secondary/ Videregående skoler	University/ Universitet og høgskoler
1988-89	492671	208405	109346
1989-90	482961	222198	121653
1990-91	473074	234884	132760
1991-92	467502	241439	142882
1992-93	463948	241393	155643
1993-94	466991	237879	165942
1994-95	470936	226983	169306
1995-96	477236	210488	176745

**Annex IV, table 3. Pupils under the Upper Secondary Education Act, who completed an advanced course I in spring 1995, by type of education completed and by education in autumn 1995. Per cent**

**Elever under lov om videregående opplæring, som fullførte et videregående kurs I våren 1995, etter hvilken studieretning de fullførte og ny utdanning høsten 1995. Prosent**

Utdanningens art ut- (studieretning) 1. våren 1995 1995 Type of education (area of study) spring 1995	I alt (=100 prosent)	I utdanning 1. oktober 1995 In education 1 October 1995					Ikke i danning oktober 1995	
	Total (=100 per cent)	Grunn- kurs Basic courses	Videregå- ende kurs I Advanced course I	Videregående kurs II Advanced course II	Lærling Appren- tices	I annen utdanning Other education	Not in education 1 October 1995	
I alt Total .....	28613	1,2	3,8	46,8	8,6	4,6	35,1	
HE-Husflidsfag og este- tiske fag Homecrafts and aesthetic subjects .....	654	5,8	15,6	14,7	-	16,8	47,1	
HK-Handels- og kontor- fag Commercial subjects .....	6868	0,7	1,0	87,9	0,1	1,0	9,3	
HI-Håndverks- og industri- fag Craft and industry .	11028	1,3	4,9	38,2	17,1	6,8	31,6	
FS-Fiskeri- og sjøfarts- fag Fishery science and maritime studies .....	503	0,2	6,8	52,7	2,4	7,6	30,4	
LF-Landbruksfag og natur- bruk Agrivocational subjects .....	1433	0,3	1,5	81,4	1,1	2,0	13,6	
HS-Helse- og sosialfag Health education and social studies .....	5231	0,6	2,9	22,5	0,5	3,9	69,6	
HH-Husholdningsfag Domestic science (home economics) .....	2896	2,1	5,8	14,4	17,4	4,0	56,3	