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Lifelong learning in Norwegian working life

Results from The Learning Conditions Monitor 2003

Preface

Learning conditions in Norway 2003. Indicators for lifelong learning

This is a summary report prepared to present indicators and main results from the Learning Conditions Monitor 2003 in a brief and easily accessible way. A basic report with more information about the data basis, questionnaires and register data, as well as the methods and analysis techniques used, is available at www.fafo.no/pub/rapp/435

The Learning Conditions Monitor is a broad survey of the conditions for learning and development of skills. The survey is conducted among a representative sample of persons of working age. It was conducted for the first time in 2003 and will be repeated in the years to come.

The survey was initiated and designed by the Institute of Applied Social Science. The data were collected by Statistics Norway as supplementary surveys for the Labour Force Survey. We would like to thank the Ministry of Education and Research for providing financial support for the project.

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Summary

Main results from The Learning Conditions Monitor 2003

All percentages are specified as shares of the age group 22 to 66.

Participation in training and formal further education

- 61 per cent of those employed participated in training or education
- In the population as a whole 53 per cent participated in training or education
- 7 per cent of the employed participated in further education
- 57 per cent of the employed participated in courses and other training
- The employed spend 26 hours per year on job-related courses and other training
- One in a hundred use their right to education leave

Organising and financing of training and formal further education

- College programmes dominate further education
- Enterprises account for 42 per cent of courses and other training not providing formal qualifications
- 69 per cent of those taking primary or secondary education courses often do it outside working hours, with 81 per cent paying their own way
- 77 per cent of courses and other training measures take place for the most part during working hours, 79 per cent with pay

Learning on the job

- 58 per cent of those employed have learning-intensive work
- Many encounter major learning requirements in their job, but there are major differences in learning requirements in different industries
- Learning opportunities in daily work are well adapted to perceived needs

- Strong learning requirements trigger good learning opportunities, but exceptions are found in some industries
- 16 per cent of employees experience poor support for learning from superiors
- 41 per cent experience the pay system in their own enterprise as not very stimulating for learning
- 56 per cent have discussed their learning needs with superiors. Learning interviews lead to more training, but not to better learning opportunities in the daily work
- Contact with colleagues is the most important source of learning at work

Learning needs and learning obstacles

- 76 per cent of those employed feel a need to learn more
- Most want to meet their learning needs through practical experience or short courses
- 34 per cent feel they have an unmet need for training
- Lack of time is the biggest obstacle in the private sector, insufficient finances of employer the major obstacle in the public sector

Who has good and poor learning conditions?

- The highly educated have better learning conditions than those with little education. They have more learning-intensive jobs, participate more in education and training, take more training during working hours and receive more learning support and encouragement from superiors
- Employees of large enterprises with more than 200 employees often have good learning conditions
- Employees in oil and gas, electrical power, mining and public administration have the best learning conditions

Chapter 1

Introduction

Introduction

This report presents indicators, data and analyses from the Learning Conditions Monitor 2003. Learning conditions is a collective term for factors affecting learning and skills development among individuals. The Monitor includes a number of learning conditions indicators. In addition to participation in various forms of learning, the indicators measure individual learning needs, motives for and obstacles to learning, various characteristics of the workplace as an environment for learning, and features of the education and training programmes.

A number of factors affect our need and access to learning: from technology, work organisation, market trends and human resource policies in the enterprises to public funding schemes and facilitation of courses and training programmes in the market for education and training. The Learning Conditions Monitor provides an overview of the overall effects of such factors on various groups in the labour market.

The Learning Conditions Monitor is a survey conducted among a representative sample of persons of working age. The survey was conducted for the first time in 2003 and will be repeated in the years to come. Repetition of the survey will provide an opportunity to follow and monitor developments in learning conditions over time.

Background of the monitor

The reason for developing a Learning Conditions Monitor for adults is broad international consensus on the importance of lifelong learning for economic growth and value creation, employment, democratic participation and social inclusion. A commonly agreed objective is that everyone should have the opportunity to participate in learning and skills development, regardless of

previous education, employment, age, sex, place of residence and ethnic background.

Together with an increased focus on lifelong learning, an acknowledgement has come to the fore that learning is “lifewide” and takes place in a number of arenas: in working life, in the education system, in voluntary organisations and in the home. In Norway and in many other countries an effort is being made to combine the various learning arenas, and to develop documentation schemes, flexible combinations and seamless transitions between learning at work, training and formal education.

No surveys and measuring instruments embracing this lifewide perspective on learning have previously been developed nationally or internationally to provide a general overview of formal education, training outside the education system, and informal learning on the job. This broad perspective underlies the Learning Conditions Monitor. The workplace plays a central role when it comes to distribution of training and education for adults, and as a learning arena and learning resource in daily life. Many of the learning conditions indicators are consequently associated with the workplace.

Measuring methods

The conditions for learning through formal education, courses and other training are relatively simple to measure through indicators such as participation, use of time, and various factors relating to the enterprise and the training programme that supports, motivates or prevents individuals from participating.

The conditions for learning through work itself are somewhat more complicated to measure, and so far no international standards in this

area have been established. Learning through work takes place by carrying out work activities that have a main purpose other than learning, in other words, activities that are *not training*. Typical examples of activities that produce learning effects are professional discussions with colleagues, customers and suppliers, feedback from superiors and the practical learning inherent in performing various work-activities. Learning that happens through ongoing work *may* be planned and structured, for example through organised colleague guidance, job rotation, observation and the like, although the vast majority of this learning takes place without such facilitation, and without it being conscious or intended.

There are two main ways of mapping learning through work. One way is to measure “participation” in activities that can have a learning effect, for example how often people have professional discussions with colleagues. The drawbacks of this approach is that a lot of important learning takes place through the actual performance of work, and that it is difficult to make an exhaustive list of all work activities that can result in learning as a by-product. The other way of mapping learning at work is to ask direct questions about how extensive the learning requirements are, and whether the job provides good opportunities for learning. The drawback is that we are not entirely aware of how the learning took place, and the factors that influence the scope of learning on the job. We have elected to combine these approaches in the Learning Conditions Monitor. We ask direct questions about learning requirements and learning opportunities on the job, and supplement these with some questions about learning activities and learning sources that we know are paramount through earlier research.

The Learning Conditions Monitor does not chart the individual’s level of knowledge or skills, but whether the *conditions* for lifelong learning are good or poor. After participating in various forms of learning, the skills of individuals will depend inter alia on personal learning motivation and learning skills/abilities.

Data and methods

The Learning Conditions Monitor is conducted as supplementary surveys to the Labour Force Survey. The Monitor was conducted the first time in second quarter 2003. Data collection was undertaken by phone by Statistics Norway. With the exception of background information on industry, enterprise, education level and occupational status, most of the learning conditions indicators were charted through personal reporting in interviews. To provide a broad and comprehensive analysis, the learning conditions combines objective factors (for example whether the person receives pay while undergoing further training) and subjective assessments (for example to what degree superiors support and inspire learning). Like other surveys based on subjective evaluations the survey is vulnerable to systematic disparities in such assessments.

The survey is conducted among a representative sample of persons aged 16-74. The survey covers over 17,000 respondents, of which 12,000 are employed. The response rate for the questions regarding formal education is 88 per cent, whereas the response rate for other questions was 61 per cent. Weights are used to correct for imbalances caused by non-response.

In this summary report the main emphasis is on describing and analysing learning among working adults aged 22 to 66. Unless otherwise

specified, the percentages are calculated as percentages of employed people aged 22 to 66.

For further information we refer to the basic report: www.fafo.no/pub/rapp/435.

Central concepts

Formal education covers all publicly approved education providing formal qualifications. This includes certificates at the compulsory education level, trade certificates or entrance qualifications for higher education earned at secondary school (including apprenticeships and the so-called practise candidate courses), publicly approved vocational school training, and training providing college or university credits. Approved further education for professions and college graduates is also regarded as formal education (for example specialist training for medical doctors).

Further education is defined as all formal education undertaken by the following groups: 1) employees, persons seeking employment and students aged 35 to 59, 2) employed persons aged 22 to 35 who define their main activity as work (not school) and who worked consecutively for at least one year, 3) students aged 22 to 35 who have had a hiatus of at least two years in their education previous to their ongoing education and who have been employed or registered as unemployed in this period and 4) unemployed who have mainly worked or applied for work the last two years before starting school.

Courses and other training cover all forms of training activity not providing formal qualifications. Seminars and other activities with learning as a main objective are thus also covered.

Learning-intensive work is a subjective measure of the scope of informal learning in daily work. The measure is composed of two personally re-

ported indicators. Work is defined as learning-intensive if the job to a large extent demands that workers continually learn something new or master new things, at the same time as the daily work provides good opportunities to acquire the knowledge and skills needed. Compared with further education and training this indicator is more vulnerable to the respondents' subjective assessments of the learning environment at the workplace.

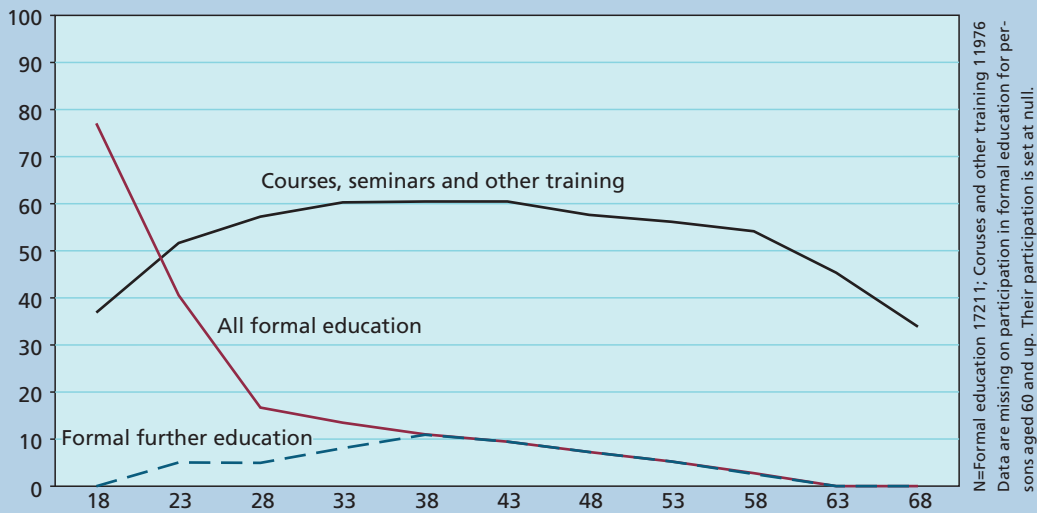
To simplify language we use the term *employees*, which in this report includes both employees and self-employed persons. The term *enterprises* is used broadly in the sense of "undertakings" and also includes the public sector. *Short higher education* mainly includes degree programmes lasting up to four years, which includes most college programmes and lower degrees at the universities. *Long higher education* is a higher education with a duration of more than four years.

Chapter 2

Formal further education

Over half of the population participates in education and training

Proportion of the population participating in training and education, by age. Percentage



■ 53 per cent of the population and 61 per cent of employees aged 22-66 participated in education or training in the last 12 months (2003):

12.5 per cent of the population aged 22 to 66 participated in formal education in the last 12 months (2003). 11.3 per cent of employees in the same age group participated. Formal education includes both initial and further education.

6.6 per cent of the population aged 22 to 66 and 6.8 per cent of the employees in the same age group participated in formal further education over the course of the last 12 months (2003).

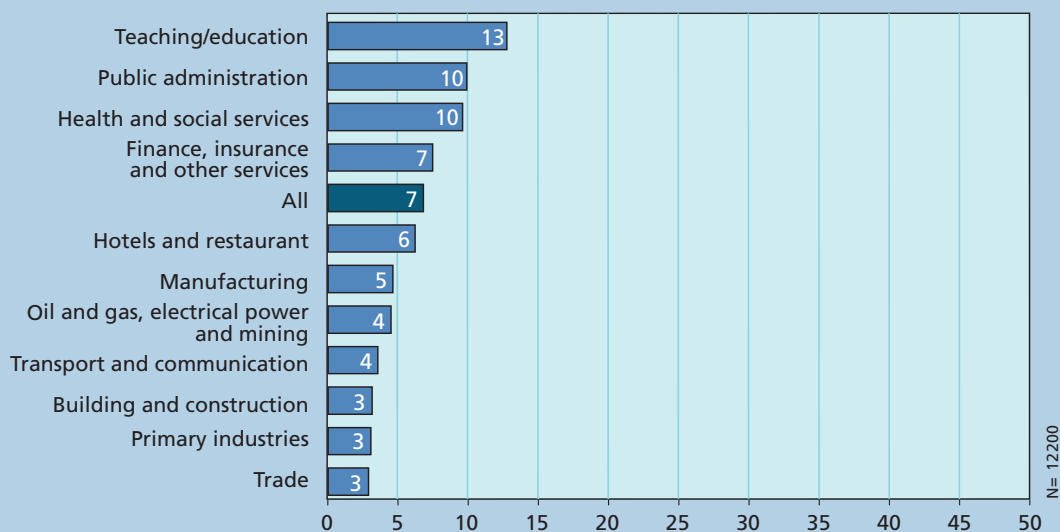
47.5 per cent of the population aged 22 to 66 participated in courses, seminars and other training (not providing formal qualifications) over the course of the last 12 months (2003). 57.2 per cent of employees in the same age group participated.

■ One third of all formal training undertaken by persons over 21 may be characterised as *further education* based on the education background and labour force participation of the participants. Those participating in formal further education participated in courses and other training more often than others.

■ The percentage participating in formal further education peaks at approximate age 40 before subsequently declining. Participation in courses, seminars and other training drops very slowly from age 45 and declines subsequently more in the mid-50s. Public employees participate most in further education.

Public employees participate most in further education

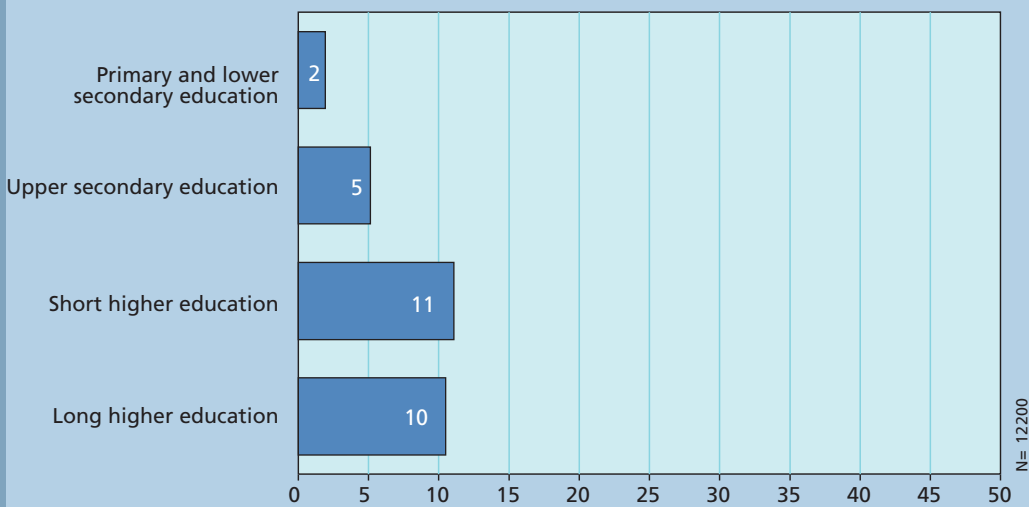
Proportion of employed who have participated in formal further education, by industry. Percentage



- Nearly twice as many public sector as private sector employees participated in formal further education. 10 per cent participated in the local government sector, 9 per cent in the central government and 5 per cent in the private sector. The industries dominating the public sector have the highest participation share, with the education sector in the lead.
- There are small differences in how many participate in further education in enterprises of various sizes. The size of the enterprises varies, however, among the industries, which masks the importance of the size of the enterprise. The probability of participating in further education is greater if a person is employed in a large enterprise with more than 200 employees than if a person is employed by a smaller enterprise in the same industry. On the other hand, employees of small enterprises with fewer than 20 employees do not have a lower probability of participating.
- Those who have work requiring that they continually learn something new or master new things do not participate more frequently in formal further education than others, taking into account the industries in which they work. This can indicate that formal further education, in contrast to courses and seminars, is only to a modest degree driven by the needs of the current job. As seen later in the report, the data in the Learning Conditions Monitor also indicate that only a minority of employers use formal education as an active part of the competence development strategy of the enterprise.

The highly educated participate most in further education

Proportion of employed who have participated in formal further education, by educational level. Percentage

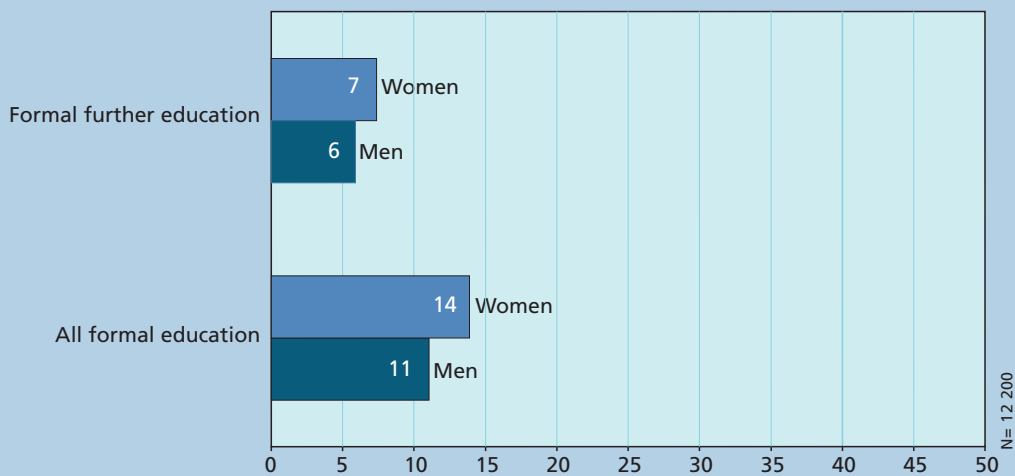


- People who already have a higher education also participate the most in formal further education. The rate of higher education graduates taking further education courses is five times that of those with only a basic education (primary and lower secondary). The “college groups” among employees take further education courses as often as those with a long higher education.
- There are several reasons why highly educated persons participate more in formal further education. First, the highly educated work to a greater degree than others in industries and occupations whose employees traditionally participate more in further education than in working life in general. Second, those who have

higher education feel a stronger individual need to learn more, and they also have a more positive attitude to learning through formal education ahead of other modes of learning. Among employees in the same industry, persons with higher education are more likely to participate in further education than their colleagues with a lower level of education. A high level of education therefore increases the probability of taking further education in working life.

Formal further education – a female strategy?

Proportion of employed who have participated in formal further education, by sex. Percentage

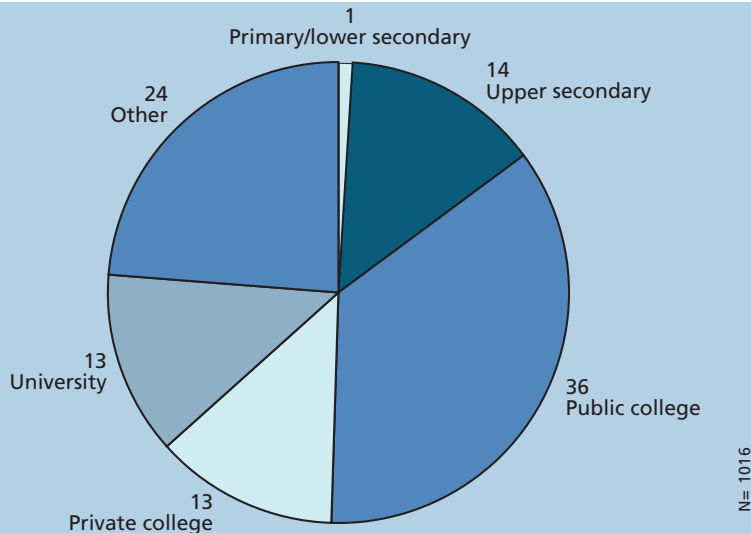


■ Women participate slightly more often than men in formal further education. The high female quotient is basically because women often work in industries in which people generally participate frequently in formal education, for example in health and social services and the education sector. There are therefore *no* clear signs that participation in formal further education is a typical individual “female strategy”:

participation in formal education is nearly the same among women and men in the same industries, although exceptions are found, including in the education sector.

College programmes dominate further education

Proportion of further education activities, by type of education/suppliers. Percentage



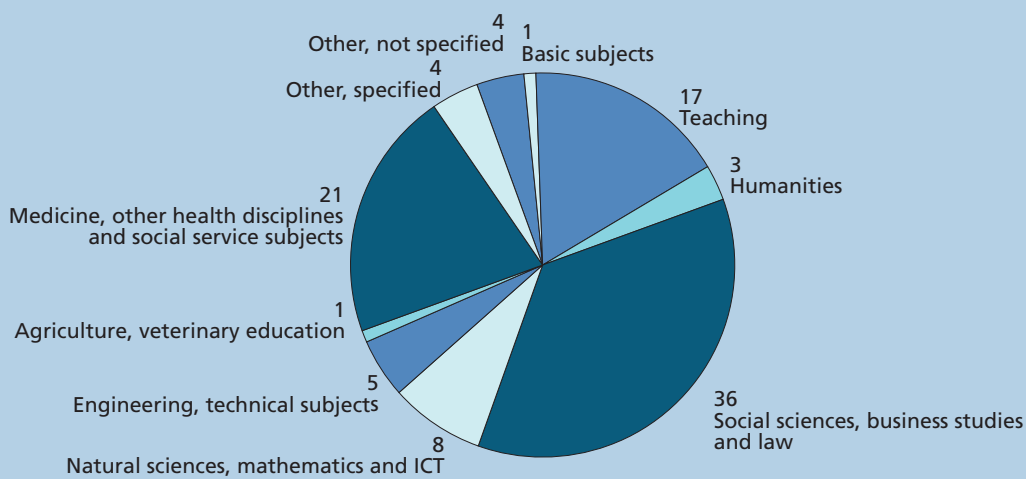
■ Most further education takes place at the college level. 36 per cent of the participants take further education courses at public colleges. A further 13 per cent take private college courses. Adults have a statutory right to a primary and secondary education, and approx. 14 per cent of everyone taking further education courses are enrolled in basic education courses. The category Other includes adult education associations, distance learning institutions, trade schools, labour market programmes and collaboration between enterprises and the public education system.

■ There are large differences in which education programmes dominate in the public and private sectors. Public college programmes comprise a dominant part of the formal further education for employees in the local government sector. College programmes are also important in the central government, but are only one of sever-

al relevant programmes in the private sector. In the private sector, private college programmes and other providers are just as important as public programmes and providers. Upper secondary education comprises a larger share of further education in the private and local government sectors than in the state. The central government is the only sector where university education makes up a major share of further education, with around one-fourth of the participation.

Management, health subjects, pedagogy and computers are the major further education subjects at college level

Proportion of further education activities, by subject areas. Percentage



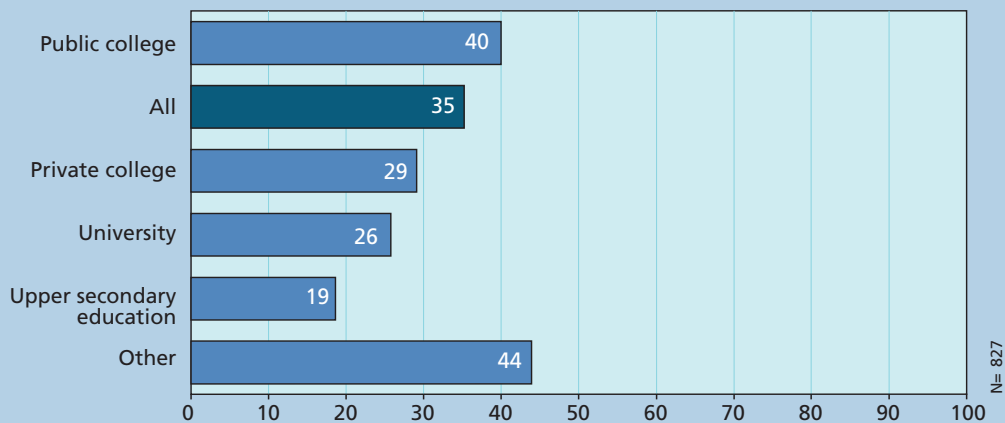
N = 492
The field categorisation is based on the International Standard Classification of Education (ISCED)

- Four groups of subjects account for the bulk of further education at college level. Most prevalent are social science subjects, business subjects, and law, accounting for nearly one-third of all participants in further education at college level. Other major subject groups are medicine, other health and social work subjects, teacher training and pedagogy, and science, mathematics and ICT.
- Within each subject group, certain subject areas account for a large percentage of the participation. Administration and management is clearly the most prevalent single subject, accounting by itself for approx. 11 per cent of all further education. Pedagogy, nursing and caregiving subjects and computers/ICT are also very important subject areas. In the case of pedagogy and nursing and caregiving subjects, their strong status as further education subjects is

connected with formal qualification requirements, and a strong tradition of professional skills development through formal education in these sectors of working life. Further education in management and ICT are common in several industries, in both the public and private sectors. Further education in management and ICT is, however, less prevalent in the parts of the private sector where there is a high percentage of workers with a low level of education.

Employees who take basic education courses often pay their own way

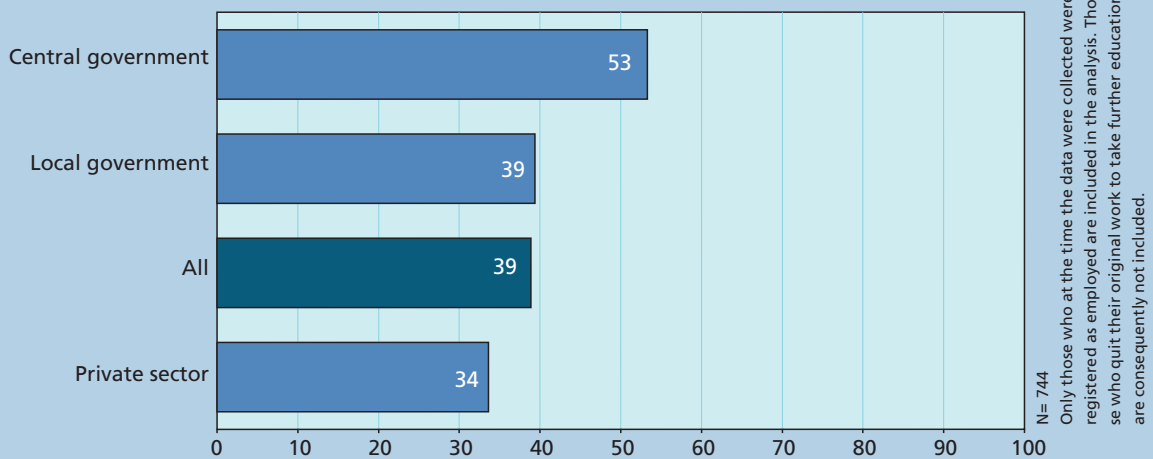
Proportion of participants whose further education is wholly or partly financed by their employer, by type/level of further education. Percentage



- 2.3 per cent of all employees aged 22 to 66 participated in fully or partly employer-funded formal further education over the course of the last 12 months.
- 35 per cent of those participating in further education receive full or partial funding from their employer for the time spent on further education. This includes both those who take paid leave or cut their position with less than proportionate cuts in salaries, and those who take training during working hours (without cutting back their position). In addition, the employer also often pays direct expenses in the form of course fees and the like, although it is often those who receive funding for the time they spend who also get their course fees funded.
- Those who take basic education (primary and secondary) courses receive funding from employers less often than those who take further education courses at the university and college level. Adults often enrol in basic education programmes on their own initiative to enhance their employability.
- Public college courses are clearly the most frequently funded by employers. Nine out of 10 of those who receive employer funding for such further education are in health and social services, education and public administration.

State employers fund further education more frequently

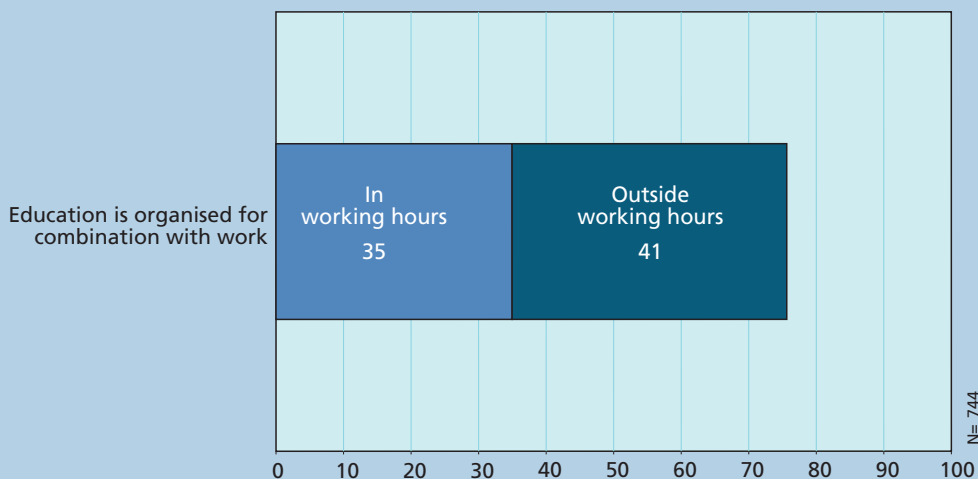
Proportion of participants whose further education is wholly or partly financed by their employer, by sector. Percentage



- The central government stands out by virtue of the fact that half of the further education of central government employees was fully or partly funded by employers. In the local government sector and in the private sector such education is more frequently funded by the individual. This can be an indication that formal education is a more integral part of the human resources and skills development policy in the central government than in other sectors.
- In the public sector the percentage of employer-funded further education is highest in public administration (50 percent) and health and social services (46 percent), but lower in education (28 percent). In the private sector, there are too few participants in formal further education in the individual industries for the differences between industries to be analysed.

Further education is often organised for combination with work

Proportion of further education activities specially organised for combination with work. Percentage



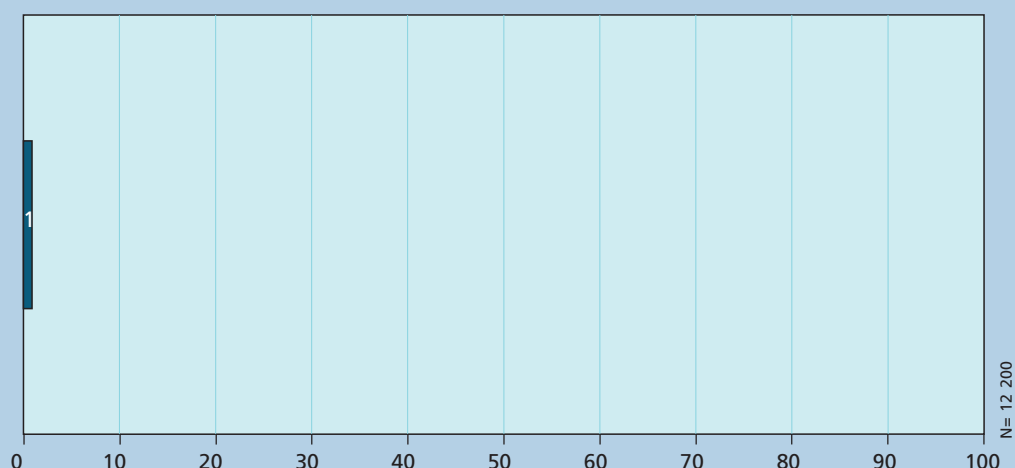
- For three of four participants formal further education is specially organised for combination with work.
- Despite the fact that formal education seems to play a more important role in the skills development policy in the central government than in other sectors, a lower percentage of further education among state employees is specially organised for combination with work. This is connected with the fact that it is easier to obtain education leave with pay in the state sector, thereby reducing the need for special organisation of the programme. In the private sector and to some degree in the local government sector employees seem to be dependent to a greater degree on special organisation in order to be able to participate at all. An effort has also been made to develop special further education programmes for the large professional groups in education and health and social services in the municipalities. This can help

explain the difference between the central and local government sectors.

- Compared with college and secondary education courses, university courses are more rarely organised for combination with work. This may be because employers to a lesser degree view university courses as relevant to work, or it may be because programme models, such as modules that make it easier to combine going to school with work, have been developed and adopted to a lesser degree.
- Just over half of the participants in specially organised further education take the courses outside working hours. In particular, many have to take upper secondary education courses outside working hours. This strengthens the impression that in practice it is more difficult to complete a basic education than other further education while working.

One in a hundred use the right to take education leave

Proportion of employed who have taken education leave. Percentage

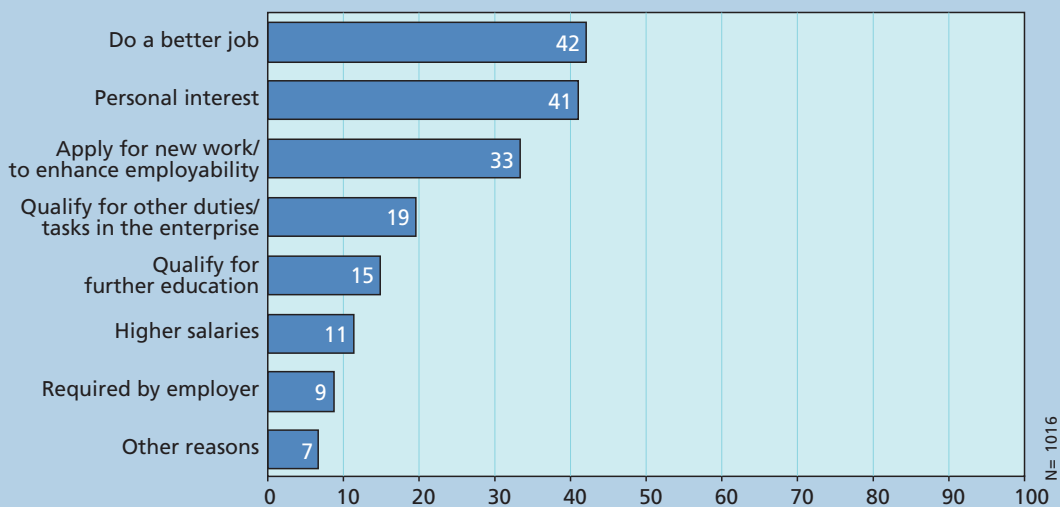


- A clear majority of those participating in formal further education maintained a full-time job or the same number of working hours (expressed as a percentage). Only one in five took leave or had their position reduced.
- 0.8 per cent of those employed exercised their right to take full education leave in 2003. This is equivalent to 17-18,000 employees. If those who have reduced their position in order to pursue a formal education are included, the

percentage who have used their right is 1.4 per cent of employees. Less than half of those who have taken education leave or reduced their position to participate in formal education received full pay, while around one in five received reduced pay.

Doing a better job is an important motive for further education

Proportion of participants citing various reasons for taking further education. Percentage



■ Personal motives for taking formal further education dominate, with more than four out of 10 listing doing a better job as a motive for further education. Formal education is taken more often than courses and other training (which do not provide formal qualifications) to strengthen opportunities for getting other jobs, either within the enterprise or in the labour market in general. Nevertheless, the most common motivation for formal further education, too, is to do a better job, or personal interest.

■ The reasons for taking further education vary with the level of further education. Only one in five who takes upper secondary education as further education, does it to do a better job, while as many as one in two who takes further education at the college level does it to do a better job. From the Learning Conditions Monitor a rough picture can be drawn in which *secondary education* is taken by individuals to strengthen their position in the job market, while *college courses* are taken to do a better job

in the position one has. *University courses* are taken more rarely on the basis of needs in working life and are more related to personal interest.

■ Such a rough sketch must not completely overshadow the fact that motives are complex, and that nearly half have several reasons for participating. Among other things, primary and secondary education is motivated more often than other education by a desire to seek a new job within the enterprise. This seems, however, often to be an individual strategy and not a part of the enterprise's human resources and competence policy.

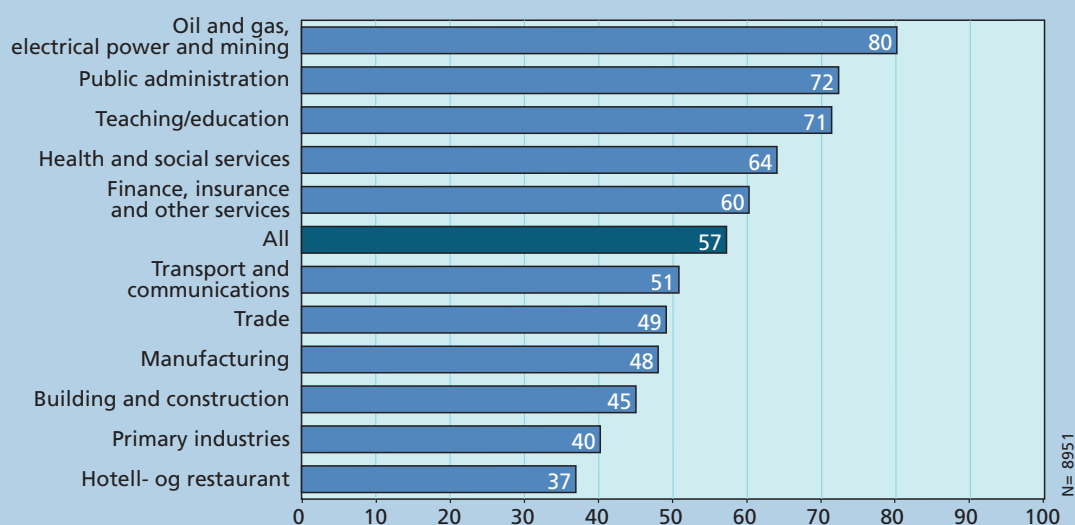
■ The reason for participating in formal further education varies somewhat between various parts of the labour force, but the differences between sectors and industries is relatively small. A number of people in their upper 30s tend to view more formal education as necessary to achieve more attractive positions in working life, either in their own enterprise or outside.

Chapter 3

Courses and other training

Over half of the working population participates in training

Proportion of employed who have participated in courses, seminars and other training, by industry. Percentage



■ In 2003, 57 per cent of the working population took part in courses, seminars and other training not providing formal qualifications. This corresponds to about 1.2 million employees aged 22 to 66.

■ There are major differences among the industries in the numbers who participate in such training. In contrast to formal further education, courses, seminars and other training are driven by the needs of the workplace. Where learning requirements and learning needs are high, more participate in training. Some of the difference between the industries is due to differences in learning requirements and consequently to what degree training is focused on in these industries.

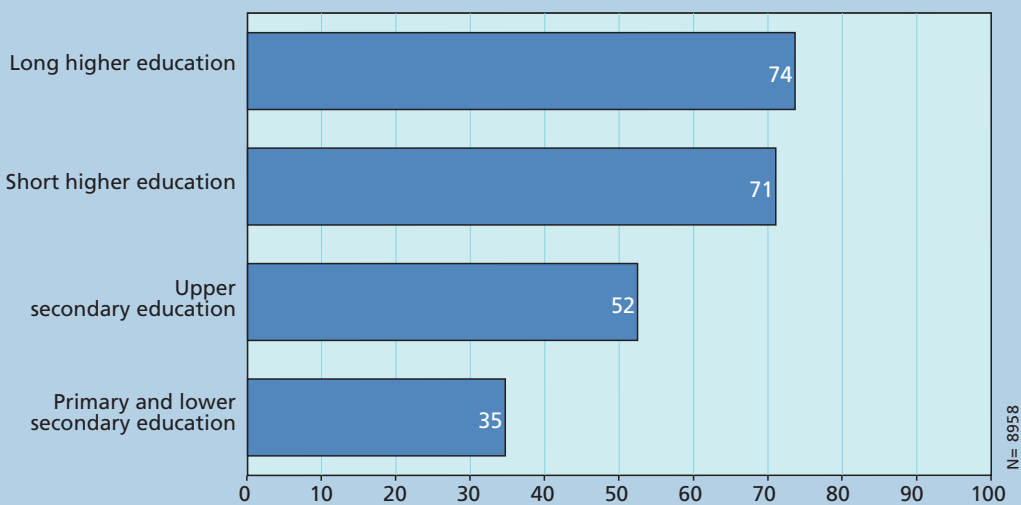
■ Oil and gas, electrical power and mining stand out because a very high number have taken courses and other training, while also in public administration, education and health and social services, more people have taken courses than in the labour force in general. The lowest rates of participation in courses and other training

are found in the hotel and restaurant sector, primary industries, building and construction and manufacturing. These industries are lower than other industries even when taking into consideration other factors that vary between the industries.

■ Employees of *large enterprises* with more than 200 employees participate much more than employees of other enterprises. Even when learning requirements in work are viewed as being the same, employees of large enterprises participate more than others. This may be linked to the fact that the enterprises' work on training is often more systematised in the large enterprises, and that they often have special units with responsibility for skills development in the enterprise. Compared with large enterprises, fewer employees of *small enterprises* with under 20 employees participate in training, but this is because small enterprises find themselves in industries where training participation is low. Working for small enterprises does not per se lead to fewer people taking part in training. The training, however, is usually of shorter duration.

The well educated participate the most in training

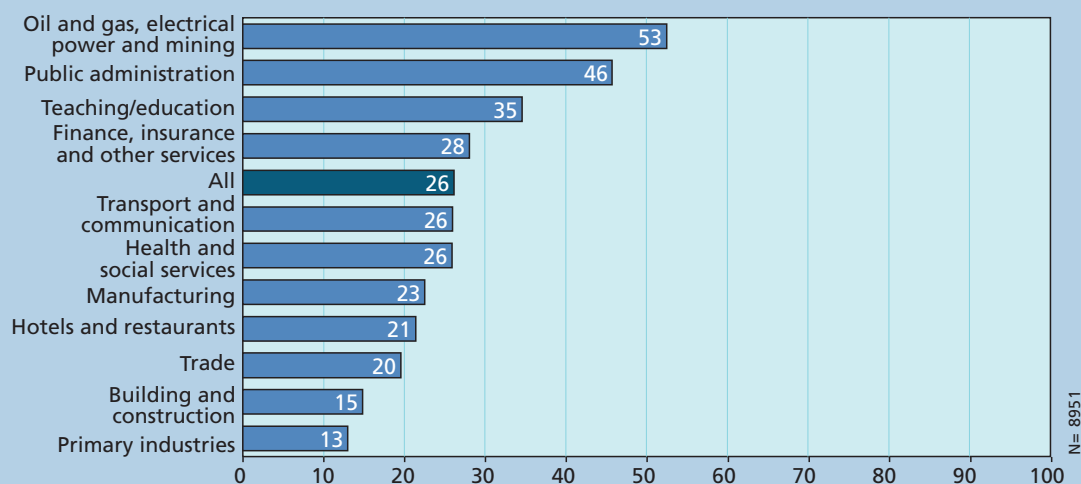
Proportion of employed who have participated in courses, seminars and other training, by the participant's educational level. Percentage



- Training in working life to a large degree cements the differences created by the education system. There are large differences between the highly and poorly educated in terms of how many participate in training. Nearly three in four persons with a higher education participated in courses and other training in the last 12 months, while one in three with only a primary or lower secondary education participated in such training.
- Training is an admission ticket to industries and to positions in working life that are learning-intensive. This is the most important reason that more highly educated persons participate more than others, while some of this is also because the highly educated are more interested in learning in working life and therefore more inclined to seek training.
- Women employees participate almost as frequently as men in courses, seminars, and other training. Women have more part-time work and work fewer hours than men. This pulls course participation down. On the other hand, women work more in industries where course participation is high.
- Participation in training increases in the starting phase of working life, but declines when persons have passed a certain age. The less education one has, the earlier «the break-off point» arrives. Employees with just a primary or lower secondary education participate less as soon as they reach the late 30s, while people with a long higher education turn 60 before course participation subsides.

Employees spend 26 hours per year on job-related training

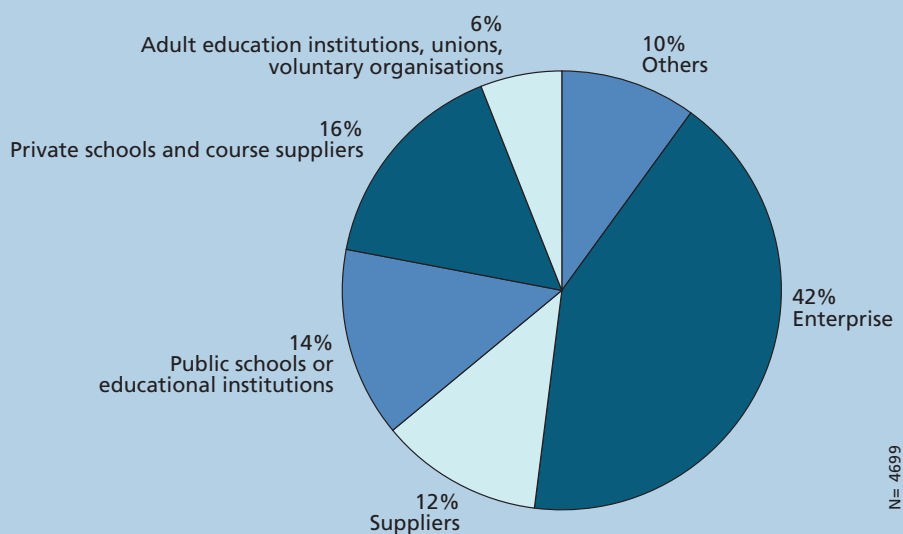
Number of hours per employed spent on job-related courses and other training in the last year



- On average Norwegian employees aged 22 to 66 spend approximately three and a half work-days participating in courses, seminars and other job-related training not providing formal qualifications. This includes both the approx. half who have participated and those who have not participated. Those who participated have on average participated in two job-related programmes. The unemployed spend around just as much time (27 hours) as employees, while those outside the workforce participate substantially less (14 hours). In the population as a whole, persons aged 22 to 66 spend 23 hours on such training.
- By and large, industries in which many people participate also score high in time use. The number of hours spent per participant is nevertheless clearly higher than the average in oil and gas, electrical power and mining, public administration and hotels and restaurants. It is lower than average in the primary industries and in building and construction.
- For working life as whole, 1.6 per cent of working hours is spent on courses, seminars and other job-related training. In addition, a significant amount of time is spent on formal further education. We do not have data on time use here.
- With an average time use of approximately 26 hours per year, around 55 million working hours are spent in Norwegian working life on participation in courses and other training, excluding formal further education.
- Using average hourly wages for the individual industries as a starting point, the overall cost of training in working life in the form of time away from production is estimated at approx. NOK 9.3 billion. This is a conservative estimate and the real number could be somewhat higher. In addition, there are costs of developing and providing training programmes, as well as all costs of formal further education.

Enterprises themselves account for much of the training

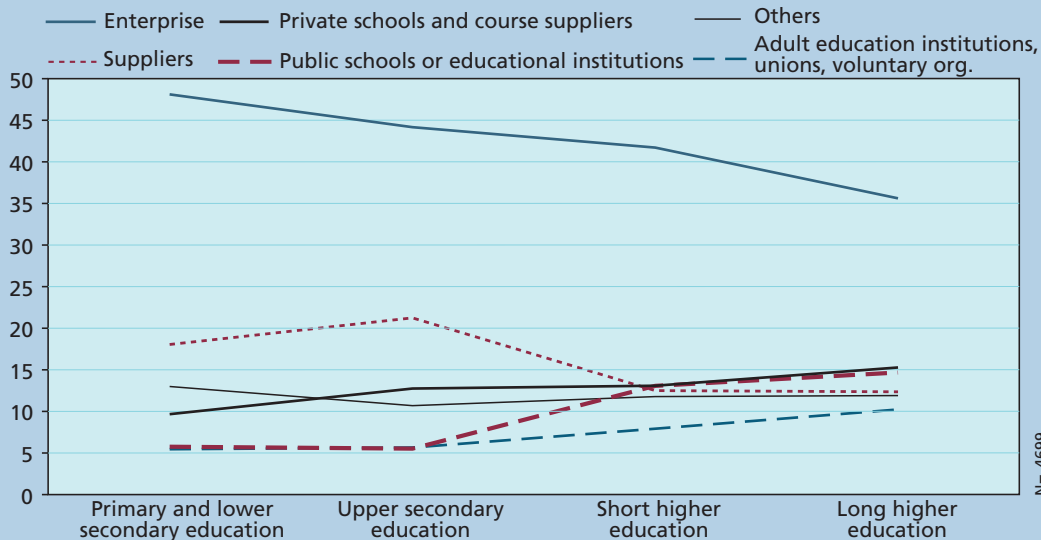
Proportion of hours spent on job-related courses and other training, by supplier. Percentage



- Enterprises themselves are the biggest providers of training in Norwegian working life. Enterprises account for 42 per cent of the hours spent on training.
- Measured in time use, private schools and course suppliers are the biggest external providers of training for the employed. Such providers account for 16 per cent of a total number of training hours of over 50 million. Public schools and educational institutions are next with 14 per cent of the hours and suppliers with 12 percent.
- Of external training providers, it is nevertheless supplier training that reaches the most people. Supplier training is, however, often short-term, so that it does not come out as no. 1 measured in hours. On average, those who participated in supplier training spent 35 hours per year. At the opposite end of the scale are programmes from public schools or educational institutions (78 hours) and programmes from private schools or course suppliers (61 hours).
- In-house training provides skills that can be used outside the enterprise less frequently than other training although even such training has transfer value in over half of the cases. Training programmes from public schools and education institutions provide skills that can be used outside one's enterprise almost as often as other programmes. On the other hand, training programmes from private schools and course suppliers stand out by more frequently providing skills that can be used outside one's enterprise. Programmes from adult education institutions, trade unions, and voluntary organisations often provide such skills. In all, 64 per cent of all courses, seminars and other training provide skills that are useful in other enterprises than where the person currently works.

In-house training is important for those with little education

Proportion of training measures offered by various suppliers, by participants' educational level. Percentage



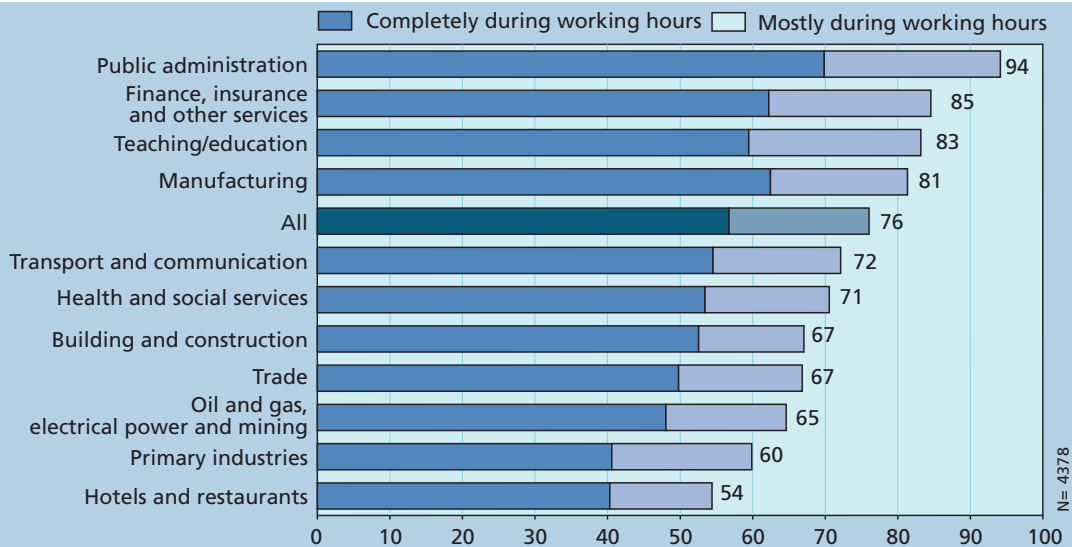
Who accounts for the training varies with the educational level of the participants. In-house training and supplier training account for two-thirds of training programmes for those with a primary and secondary education. For those with higher education, such training accounts for under half of the training programmes. Although in-house training is also dominant for those with higher education, there is a greater element of training from public schools and educational institutions and other external providers for this group. It appears as though external providers of training have been more successful in organising and selling to enterprises training programmes for the highly educated than programmes for employees with a lower level of education. However, it is difficult to view this as a weakness on the supply side since the demand from employers is what is often lacking. Employees who want to complete their basic education are often told to seek programmes individually outside work.

In-house training accounts for more than half of the training programmes in the central government, while the proportions in private and local government sectors are somewhat lower. In the private sector, supplier training accounts for over a fifth of all programmes, while it accounts for under a tenth in the public sector. Public schools and educational institutions have the clearest foothold in the local government sector, where they account for nearly a fifth of the programmes. Training programmes from public schools and educational institutions are less important in the central government, and nearly absent in the private sector where only one in 20 programmes are provided by public schools and educational institutions.

Training provided by suppliers has a clear small-enterprise profile. The smaller the enterprise, the greater the probability that training is provided by suppliers.

Most of the training takes place during working hours

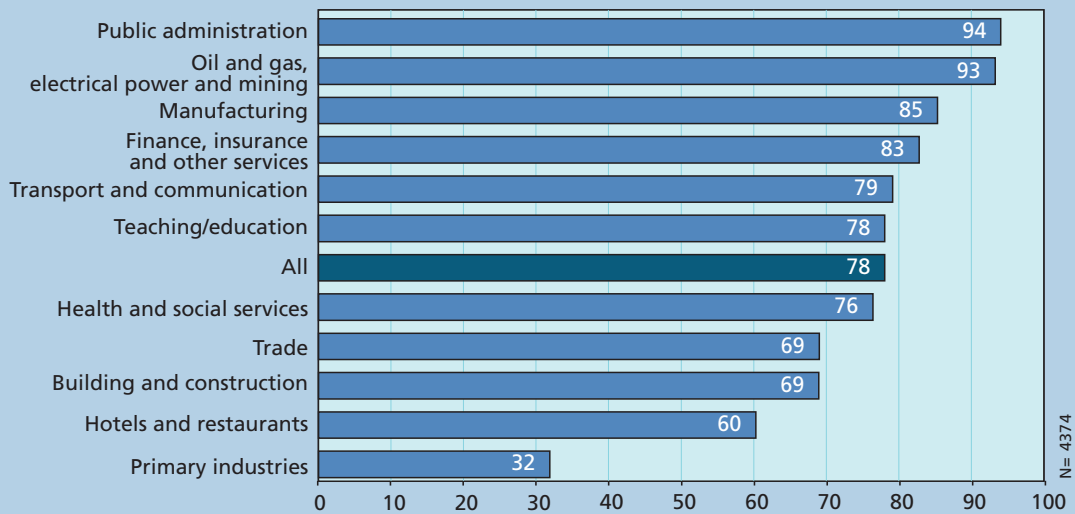
Proportion of participants who have undergone training in working hours, by industry. Percentage



- Three-fourths of all job-related training programmes are carried out during working hours.
- The chances of taking part in job-related training during working hours vary between the different industries. The best opportunities to take training during working hours are found in public administration. Here, 95 per cent of those who participated in training did so completely or mainly during working hours. At the opposite end is the hotel and restaurant industry, where just above half have taken training during working hours.
- The highly educated can take training during working hours more often than employees with a lower level of education. More than one out of four with only a primary or lower secondary education must take training completely outside working hours, while only one out of 10 with a higher education has to do the same.

Most are paid during training

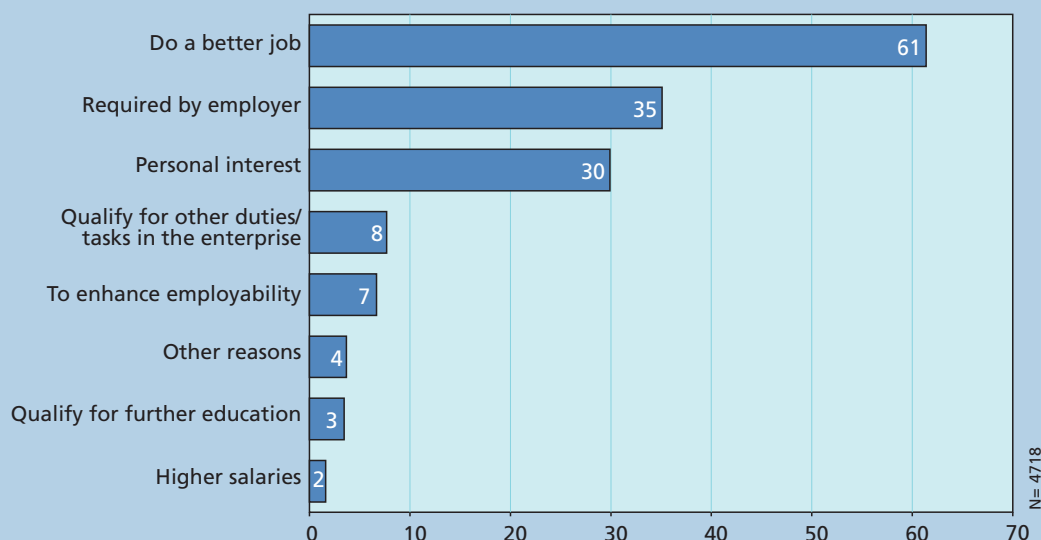
Proportion of participants who have received pay during training, by industry. Percentage



- Over three out of four receive pay during training.
- Training taking place during working hours is nearly always with pay, but in certain industries much of the training outside working hours also takes place with pay. The best example is oil and gas, mining and electrical power where a third of the training programmes take place outside working hours, with nearly all training taking place with pay. This is an industry where many have a higher education and learning requirements are high. In general, employees with only a basic or secondary education are paid less frequently for job-related training than others. Such non-paid training is also often carried out outside working hours.
- The Learning Conditions Monitor shows that enterprises commit less to training of employees with a low level of education. This can be because these employees may have a greater need to take more general training that the enterprises to a lesser degree are willing to pay for. However, the enterprises also fund a lot of training providing skills that can be used outside the enterprise. Training that employees view as useful at other type of enterprises is paid equally often as more enterprise-specific training.

Doing a better job is the most important reason for participating in training

Proportion of participants who cite various reasons for participating in training. Percentage



- By far the dominant reason for participating in courses, seminars and other training is *to do a better job* in the position one has. Half or more of people in all industries have this as a reason for participating in training.
- Only 7 per cent participate in training to become more employable. Even in the industries where this motive is strongest – hotels and restaurants and building and construction – only one in 10 lists this as a reason. Very few also list other reasons for participating that *point beyond their current job*, such as qualifying for other duties/tasks in the enterprise (8 per cent) or qualifying for further education (3 per cent). Such factors are a much more important part of the motivation for taking formal further education than for taking courses and other training that do not provide formal qualifications. Training provided by public schools and educational institutions is somewhat more often than other training motivated by factors

pointing beyond their current job, but also for such training there is only a tiny minority that have such motives.

- A rather large percentage of those participating, experience the training as required by their employer (35 per cent). Internal training is more frequently experienced as required/mandatory than training organised by external suppliers. At the same time internal training is somewhat more rarely motivated by a desire to do a good job than other training. This can indicate that some of the internal training is experienced as a duty without any particular benefit. Of the industries, oil and gas, mining and electrical power and transport and communications stand out in that over half specify that that the training was planned. The two industries are otherwise rather different in terms of skills, with high participation in training in oil and gas, electrical power and mining and relatively low participation in transport and communication.

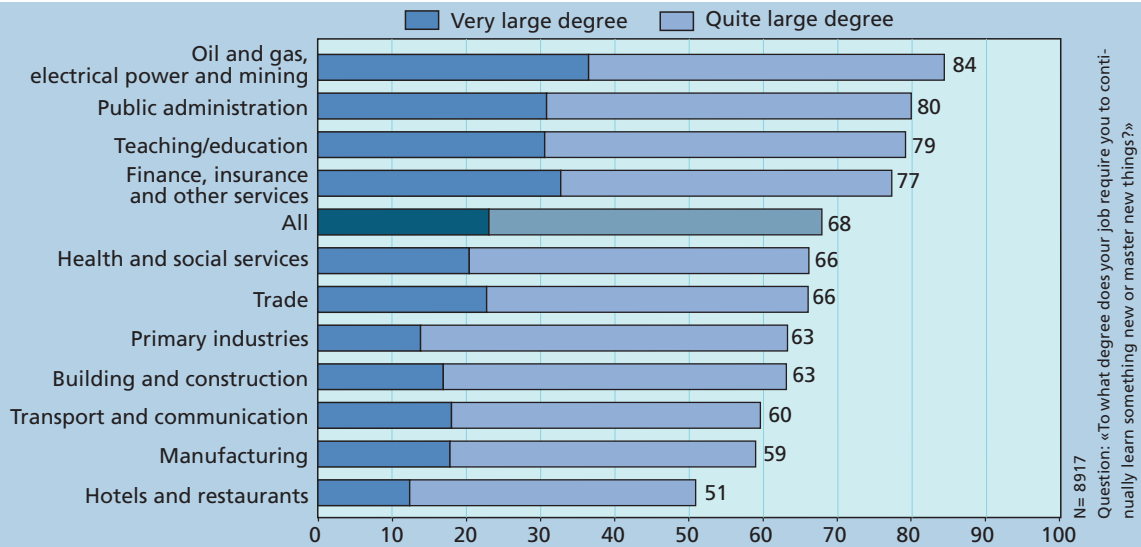


Chapter 4

Learning through work

Major difference in learning requirements in different industries

Proportion who experience high learning requirements on the job, by industry, Percentage



■ In working life as a whole 68 percent of employees have very or quite high learning requirements on the job. Learning requirements on the job vary among the industries. Employees in oil and gas, electrical power and mining, public administration, education and finance, insurance and other services encounter the strictest learning requirements. The differences between the industries seem to be due to real differences in work content and work organisation. They are not due to differences between industries in the size of the enterprises or education level in the workforce. Although most industries in the public sector are more learning-intensive than average, the work is viewed as nearly equally learning-intensive in the private and local government sectors. On the other hand the central government stands out as having a larger share of jobs with strong learning requirements.

■ The jobs in large enterprises with more than 200 employees are felt as requiring learning somewhat more often than jobs in smaller enter-

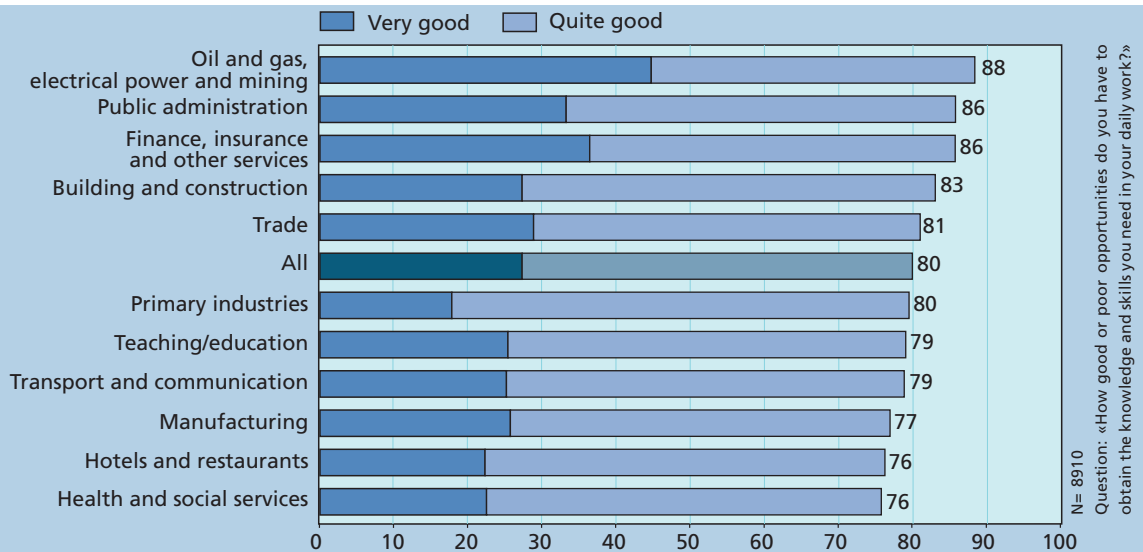
prises in the same industry. Many of the large enterprises are probably found in segments in the market requiring learning in their respective industries, which subject the employees to major learning requirements. On the other hand jobs in small enterprises with fewer than 20 employees require learning as often as jobs in somewhat larger enterprises.

■ Education provides work that requires learning. The higher education one has, the more often work is requiring learning. While under half of those with primary and lower secondary education have work with strong learning requirements, the same is true of nearly nine out of 10 with a longer higher education.

■ Women feel less often than men that they have jobs with strong learning requirements. This also applies when the industries in which they work are taken into account. A possible interpretation of this is that women to a lesser degree than men receive or seek work with strong learning requirements at the individual workplace.

Learning opportunities in daily work are well adjusted to perceived needs

Proportion who experience good opportunities for learning in their daily work, by industry. Percentage

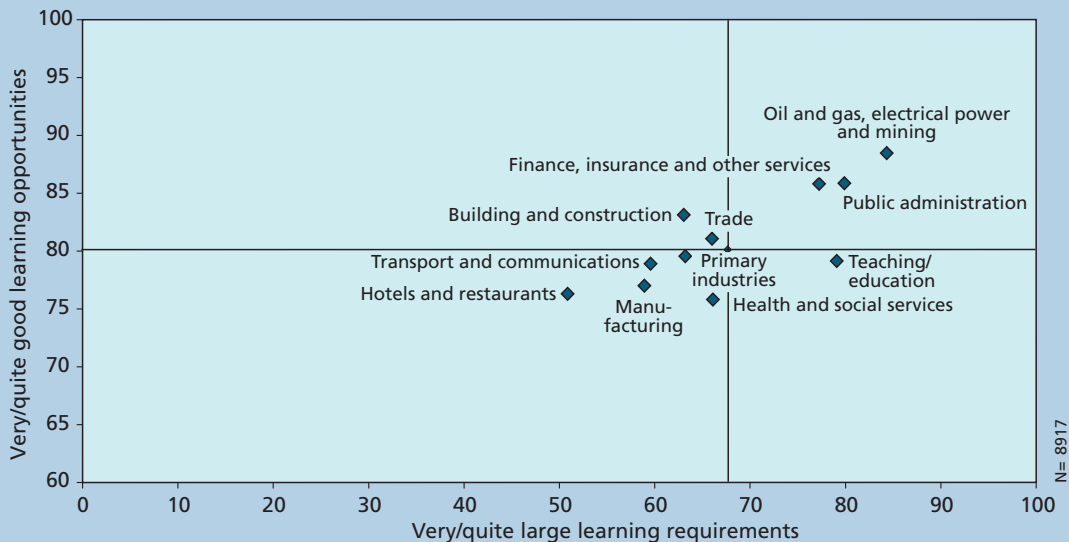


- The opportunities for learning in daily work are perceived as good in relation to the perceived needs. As many as 80 percent of employees characterise learning opportunities as good. There are small differences between the industries. In all industries learning opportunities are perceived as good by a large number of employees. Employees in the local government sector experience somewhat poorer learning opportunities than in the central government and private sectors, which is linked to the fact that health and social services is one of the industries with the lowest learning opportunities. In large enterprises with more than 200 employees more people feel they have good learning opportunities than in other enterprises.
- The higher level of education a person has, the better learning opportunities he or she experiences, although the differences are smaller than the differences in learning requirements.

- Women experience poorer learning opportunities than men in their daily work. The differences between women's and men's learning opportunities are greater than the differences in learning requirements. Women's poorer learning opportunities are due to real differences between men and women and are not just a reflection of the sectors of the labour force men and women find themselves in. Even when women have the same educational background and are in the same industries as men, they experience poorer learning opportunities. Men and women either have different subjective perceptions of the same type of work or men have to a larger degree positions in the labour market that provide good opportunities for learning in the course of daily work. Some of the explanation may be that men more frequently have management responsibilities, and that management positions often provide good learning opportunities through day-to-day work.

Strong learning requirements trigger good learning opportunities, although exceptions exist

Learning requirements and learning opportunities, by industry. Percentage



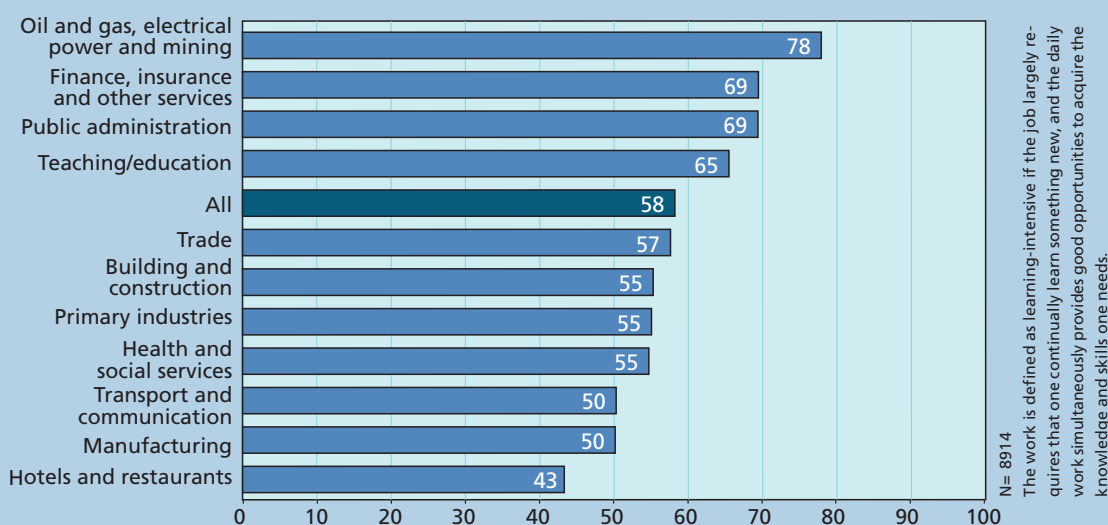
- In sectors and industries where learning requirements are large, employees generally have correspondingly good learning opportunities through daily work. External requirements for learning lead to an organisation of the work providing access to learning resources through daily work. In addition, employees encountering strong learning requirements have greater opportunities to participate in training and education.
- There are, however, exceptions: parts of the labour market that score relatively lower on learning opportunities than on learning requirements. One of these is the education sector with high learning requirements and only medium learning opportunities in daily work. Another is the health and social services sector with medium learning requirements and the poorest learning opportunities of all the industries. Are there inherent features of the work in these sectors that lead the development of skills in these sectors to take place through training? Or is there potential for organising the work in these sectors differently so that more learning

can take place during day-to-day work? The building and construction sector represents an interesting contrast: here, the learning requirements are under average, while learning opportunities in the daily work are above average.

- In general, learning opportunities are assessed as good, even in the parts of the labour market where learning requirements on the job are relatively weak. This indicates that learning opportunities are assessed in relation to the need on the job. An employee with weak learning requirements and little learning can therefore be just as satisfied with learning opportunities as an employee with strong learning requirements and much learning.
- As mentioned in Chapter 1, we define work as learning intensive when an employee experiences very large or quite large learning requirements *simultaneously* as he/she experiences very or quite good learning opportunities. The combination of external pressure and good access to learning resources is expected to lead to learning.

Over half of employees have learning-intensive work

Proportion with learning-intensive work, by industry. Percentage



■ In working life as a whole, 58 percent of employees have learning-intensive work. Oil and gas, electrical power and mining stand out by having the most learning-intensive jobs. Nearly four out of five employees in these industries have a learning-intensive job. Finance, insurance and other private services, public administration and the education sector are industries with high learning intensity. The least learning-intensive jobs are in the hotel and restaurant industry, but also manufacturing and transport and communications have less learning-intensive work than in working life as a whole.

■ The differences between the industries can hardly be explained by differences in the employees' educational background or in the size of the enterprises, but seem to be due to differences in the content and organisation of the work. An industry such as health and social services, for example, has a higher share of employees with a higher education than oil and gas, electrical power and mining. If such factors are taken into consideration one should expect that the health and social services industry should have far more

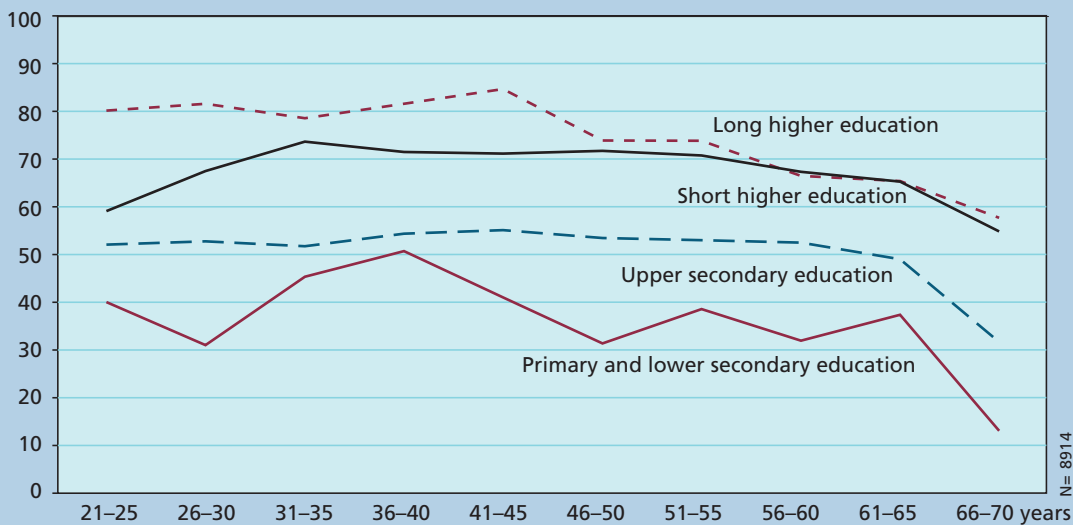
learning-intensive jobs than it actually has. The same applies to certain other industries with many highly educated employees.

■ The central government has a higher share of learning-intensive workplaces than the local government and private sectors, which to a certain degree must be seen in connection with the high level of education of state employees. Despite the fact that the education level in the local government sector is higher than in the private sector, it nevertheless does not have more learning-intensive jobs than the private sector.

■ Small enterprises have equally learning-intensive jobs as the somewhat larger enterprises (20-199 employees). This may be connected with the fact that employees of small enterprises often carry out a broader range of duties than employees in large enterprises, due to less specialisation of duties. On the other hand, the largest enterprises (more than 200 employees) have more learning-intensive jobs than the labour market in general.

Higher education is an admission ticket to learning-intensive work

Proportion with learning-intensive work, by age and educational level. Percentage



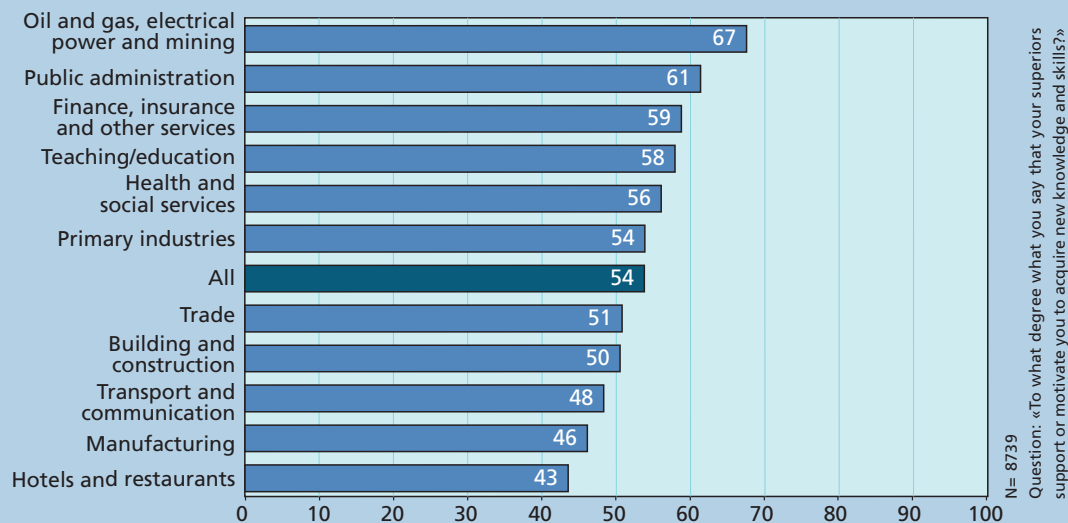
N = 8914
 The work is defined as learning-intensive if the job to a large degree requires that one continually learn something new, and the daily work simultaneously provides good opportunities to acquire the knowledge and skills one needs.

■ Employees with longer higher education have the most learning-intensive work. While college groups and others with a shorter higher education participate just as much in training, those with longer higher education have the most learning-intensive jobs. This is probably because persons with a higher education are put into positions in working life that objectively require and provide learning, while a smaller portion is because persons with a higher education experience a greater need for learning than others even when learning requirements and opportunities on the job are the same.

■ Fewer women than men feel that they have learning-intensive work, even within the same industry. Even when learning requirements on the job are the same, women experience poorer learning opportunities in the day-to-day work than men. Similarly, women experience weaker learning requirements even when learning opportunities are the same. The difference between women and men may be due to different evaluations of the same work or that women seek or are given less learning-intensive work.

Half of employees experience good learning support and encouragement from superiors

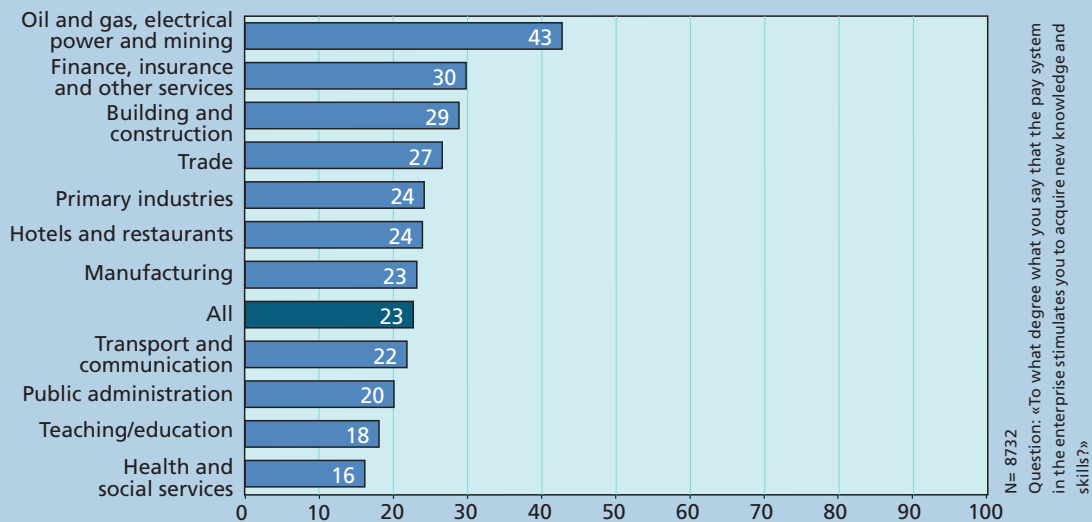
Proportion of employees who receive good learning support and encouragement from superiors. Percentage



- In working life as a whole half of the employees say they receive very or quite good support and encouragement from their superiors to acquire new knowledge and skills. In the same industries featuring high learning requirements and good learning opportunities, managers are perceived as supportive of learning.
- Regardless of industry, employees with learning supportive managers experience generally better learning opportunities in their daily work. Wherever there is good learning support from superiors the learning requirements are also high. This can be interpreted as meaning that managers give more learning support when the work requires learning, but also that such support can get employees to see the work as more learning-intensive.
- Learning support and encouragement declines the older the employee is, and the less education he or she has. Both factors are significant, but the difference between those with a high and low level of education is first and foremost due to highly educated employees having jobs that more often require learning. Older employees seem, however, to receive somewhat less learning support even when the job requirements are the same. At the outset, there are no clear differences between men and women as to what degree they feel their superiors are supportive of learning. When women are in jobs with equally high learning requirements as men, they do, however, experience stronger learning support from their superiors.

Pay systems are perceived as not very stimulating for learning

Proportion of employees who experience the pay system in their own company as stimulating to learning. Percentage

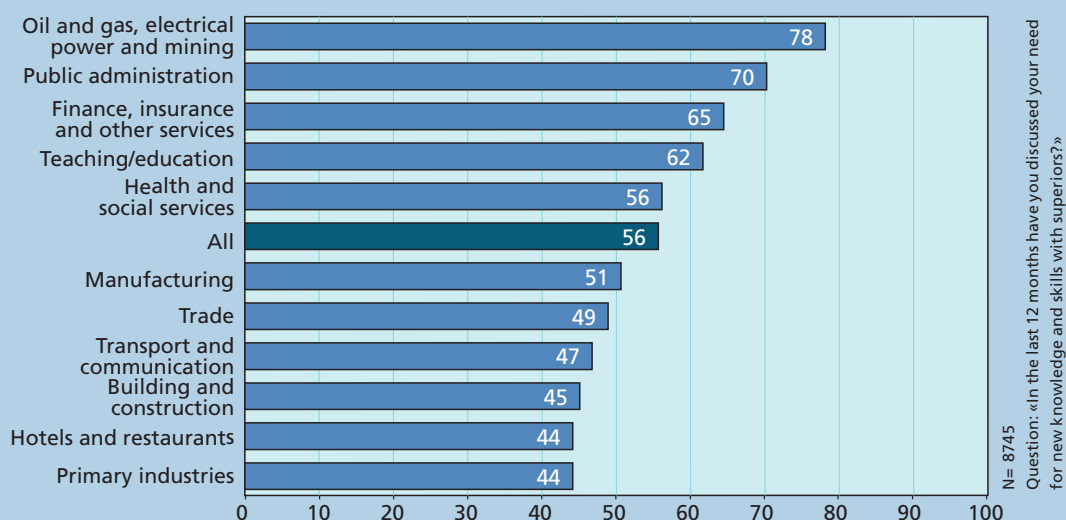


■ Only 22 percent of employees see the pay system of the enterprise as stimulating for learning. A pay system that stimulates learning can involve pay-related perks to take training or education or that the pay system rewards capability and mastery of tasks/duties. Only in oil and gas, electrical power and mining are there many who see the pay system as stimulating for learning. Lowest are the industries that dominate the public sector: health and social services, education and public administration, although large parts of the private sector are also not much higher.

■ The fact that the entire public sector scores low is far from a given, since increased formal qualifications are rewarded by an increase in salaries in central parts of the public sector. This is an important element in the pay system for teaching staff. It seems as though employees feel the pay system is the most stimulating for learning when learning through the day-to-day work is rewarded, and to a much lesser degree when it is associated with carrying out formal education or training. A pay system viewed as stimulating for learning is often found where learning requirements are strict and learning opportunities in the daily work are good.

Learning interviews lead to more training, but not to better learning opportunities in the work itself

Proportion of employees who have discussed learning needs with their superiors during the last year. Percentage

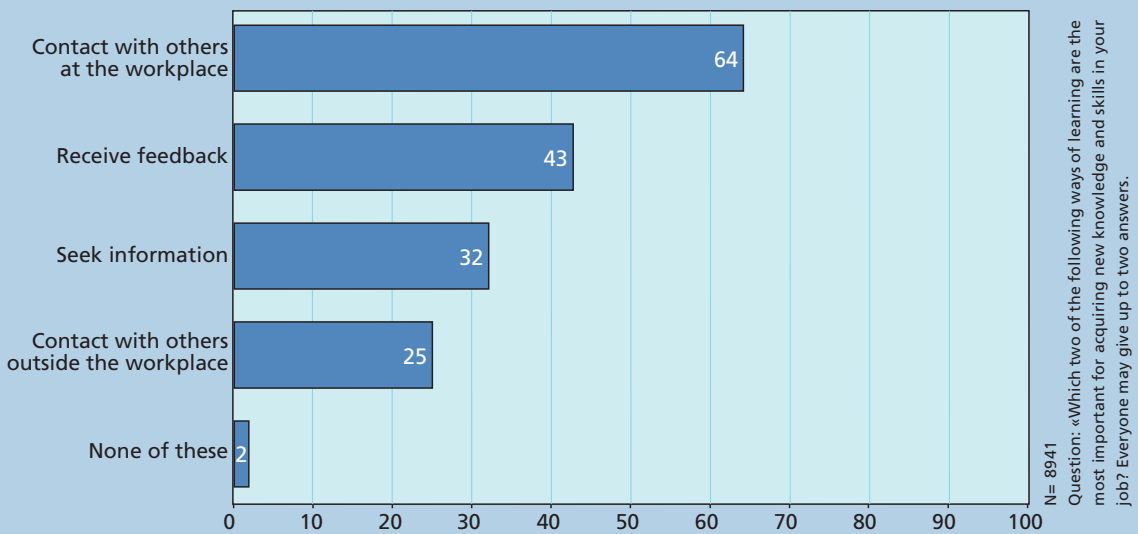


- In all, 56 per cent of employees have discussed their skills needs with superiors over the course of the last year. It varies somewhat between the industries as to what extent this takes place. Here too, oil and gas, electrical power and mining stand out. In these industries, more than three out of four discussed their skills needs with superiors.
- Discussing skills needs with superiors can mean that charting of learning and training needs are included as a part of the enterprise's routines. An interesting question is whether this affects the learning environment at the workplace and participation in training and education, or

whether such interviews «have a life of their own» apart from the major skills development processes of the enterprise. The answer is not crystal clear. Such interviews seem to lead to more participation in training and education, regardless of the perception of learning requirements in the work. On the other hand, such interviews do not increase learning opportunities through the daily work. Consequently, there is much to indicate that the talks with superiors about skills needs are primarily about the need for training, and to a lesser degree how the day-to-day work can be organised to increase learning opportunities.

Contact with colleagues is the most important learning source at work

Proportion who say that various forms of learning are important for learning on the job. Percentage



■ Contact with others at the workplace is the most important source of informal learning in the day-to-day work. Sometimes the learning source is consciously employed, such as when colleagues provide advice, guidance or instructions as part of a learning programme, but most often the learning takes place without being a part of a planned learning programmes.

■ The learning sources in the day-to-day work can be *internal*, such as contact with colleagues and receiving feedback from superiors, but they can also be *external*, such as contact with others outside the workplace and external written information. Those who experience strong learning requirements in the work attribute greater importance to external learning sources than those who encounter weaker learning requirements. Personally seeking information is a source of learning that is particularly used by those who have learning-intensive work with high learning requirements. Having contact with others outside the workplace is, however, not only a source of learning. Such external con-

tact also means that individual employees are exposed to learning requirements. Enterprises that organise the work so that many employees have contact with persons and environments outside the undertaking, such as suppliers, customers and others, therefore stimulate learning in the enterprise. For those whose work is not very learning-intensive, feedback on their work is the most important source of learning.

■ The higher the level of education of the employee, the more important it is to seek information personally, and the less important it becomes to receive feedback on work. 58 per cent of those with a long higher education feel that personally seeking information is important, against only 18 per cent among those with only a basic education.

■ The range of external persons and environments of significance for learning is wide. Suppliers, customers/users, professional networks and others are viewed as important learning sources by one-third or more of the employees.

Many who have learning-intensive work participate in training, but not all

Have participated in training or education	Learning intensive work	
	Yes	No
Yes	40%	21%
No	18%	21%

N= 8914

- Participation in training and learning through the day-to-day work is more often a both/and rather than an either/or situation. Those who have learning-intensive work, also participate more often in training. Learning through work itself does not therefore contribute to an evening out of the differences between those who participate and those who do not participate. Rather, the differences are strengthened somewhat. Nevertheless, it is possible to see signs that learning through day-to-day work and training are to some degree alternative forms of learning. 18 per cent have learning-intensive work without having participated in training, while 21 per cent have work that is not very learning-intensive, but participated in training. The Learning Conditions Monitor also shows that the better the learning opportunities through day-to-day work, the less perceived training needs people have.
- High learning requirements in work lead to more participation in courses and other training.

Good learning opportunities in the day-to-day work can also stimulate more course participation, but to a much weaker degree than high learning requirements. This is connected with the fact that learning through the day-to-day work can sometimes be an alternative to taking a course. Those who have learning-supportive managers participate more in courses and other training than others, even when learning requirements in the work are the same.

- Neither high learning requirements nor good learning opportunities are significant for the probability of participating in formal further education. As previously mentioned in the report, this shows that participation in formal further education springs to a lesser degree than other training from job needs. Learning support from superiors on the other hand, inspires not only course participation, but also participation in further education.

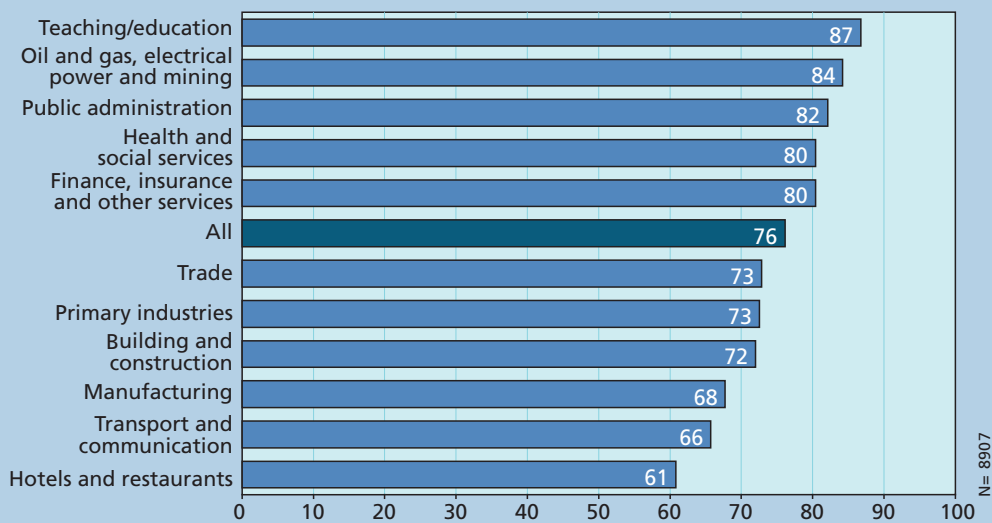


Chapter 5

Learning needs and learning obstacles

Three out of four feel a need to learn more

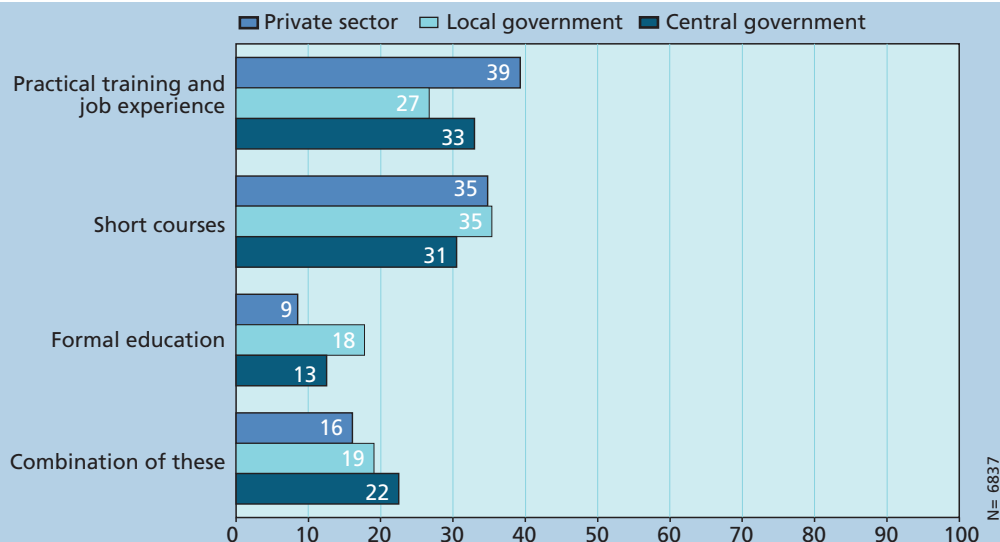
Proportion of employed with need of new knowledge and skills (learning need), by industry. Percentage



- The great majority, about three out of every four employees, experience that they have a need for new knowledge and skills. Only 24 per cent feel that they do not have any need to learn more. The perceived learning need rises with an increase in educational level, and falls somewhat with an increase in age.
- If we view working life as a whole, there is no difference in the learning needs of men and women. In the same industry or occupation, women nevertheless feel a smaller learning need than men, even when the learning requirements of the job are equally great.
- Employees in jobs with strong learning requirements feel a bigger learning need than employees with small learning requirements at work. Good opportunities for learning in the daily work, on the other hand, makes the learning need smaller, which suggests that parts of the learning needs are covered through learning on the job.
- There are major differences in the perceived learning need felt by employees in different industries. The learning need is smallest among employees of hotels and restaurants, transportation and communication industry and manufacturing. This is due partly to employees in these industries being confronted with low learning requirements, but there are big differences in learning needs between the industries even when the employees experience equal learning requirements at work. This suggests that the differences are due in part to different attitudes to or traditions for learning in different industries, which is also reflected in employees' perceptions of their own learning needs. Perceived learning needs are greatest in education, oil and gas, electrical power, mining and public administration.

Most people want to learn through practical experience or short courses

Proportion of those with learning needs who prefers various learning forms, by sector. Percentage



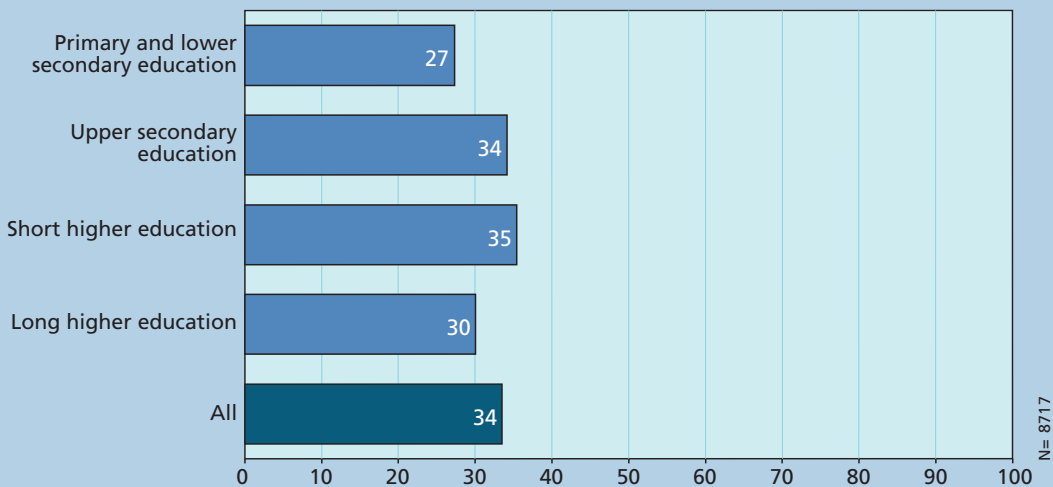
- Most people who feel that they have a learning need, prefer to acquire new knowledge and skills either through practical training and job experience or else through short courses. Thirty-six per cent prefer to learn through practical training or job experience, and about the same proportion prefers to learn through participation in short courses. The others want either to learn through formal education or by a combination of different learning forms.
- Interest in different learning forms differs between sectors of the workforce. Levels of interest in formal further education are higher among local government workers than those in central government or the private sector. Among the industries and occupations, interest in further education is strongest in the industries teaching/education and health and social services. On the other hand, interest in learning through practical training or job experience is greatest in the primary industries, in trade and industry.
- Those with the least education are the most oriented towards learning through practical training

or work experience. Forty-one per cent of those with primary or lower secondary education and with a learning need, prefer to learn in this way. The corresponding figure among those with an upper secondary education is 38 per cent, and 32 per cent among those with university or college education. Interest in other forms of learning, however, differs little between the educational groups.

- Many people want to continue learning in the same way as they have done previously. Employees who encounter high learning requirements and who have good opportunities for learning in their daily lives, prefer practical training or work experience. Those who have participated in courses and other training, on the other hand, prefer to learn through short courses. In the same way, those who have participated in formal further education are more motivated for this kind of learning than those who have not participated. Even among those who have participated in further education, it is nevertheless learning in their daily work that is the most widely preferred learning form.

One out of three feels an unmet need for training

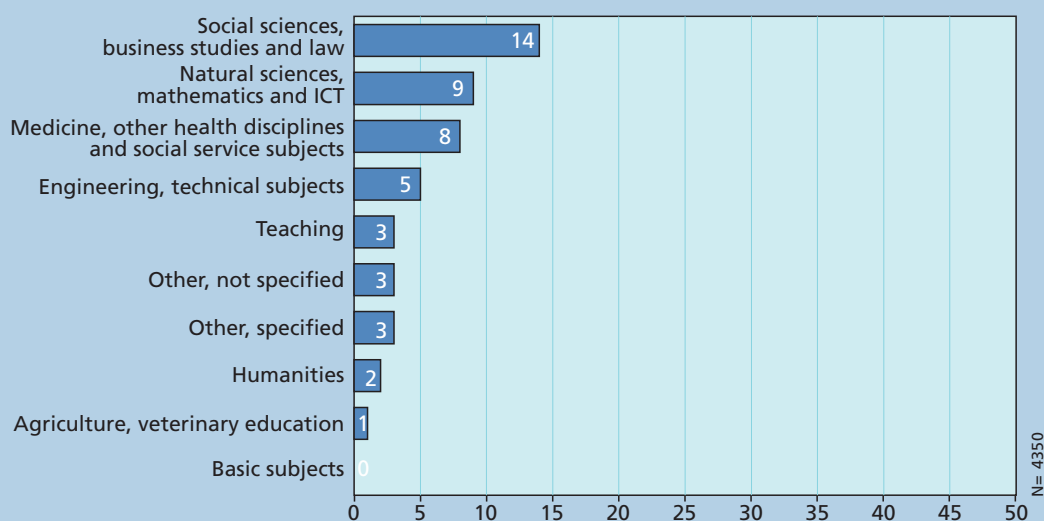
Proportion of employed who feel they participate too little in education and training, by educational level. Percentage



- There are many who believe that they have a need for new knowledge and skills without thinking that they are currently participating too little in training and education. About one in three employees, however, thinks that they participate too little in training and education. These employees feel an unmet need for training. This is a group that generally has upper secondary education or higher and encounters great requirements for learning in their daily work. They participate generally somewhat in training, but nevertheless feel that they participate too little.
- More women than men feel they have an unmet training need, but this is due primarily to the fact that women work in sectors of the economy which lay greater emphasis on training and education. This applies particularly in the health and social services sector.
- Jobs with high learning requirements stimulate the learning need and thereby also increase the unmet training need. Good learning opportunities in the day-to-day work and support and encouragement for learning from management, on the other hand, lead to the training need being smaller.
- There is a higher proportion of people with an unmet training need in the local government sector than in working life overall.
- The size of the enterprise does not appear to be of significance for the degree to which an unmet training need is felt. Even if employees in the biggest companies participate more often in training and education and have better learning opportunities on the job, they have equally large unmet training needs.

Many people want training in administration and management

Proportion of employed who wants training or education within various subject groups. Percentage

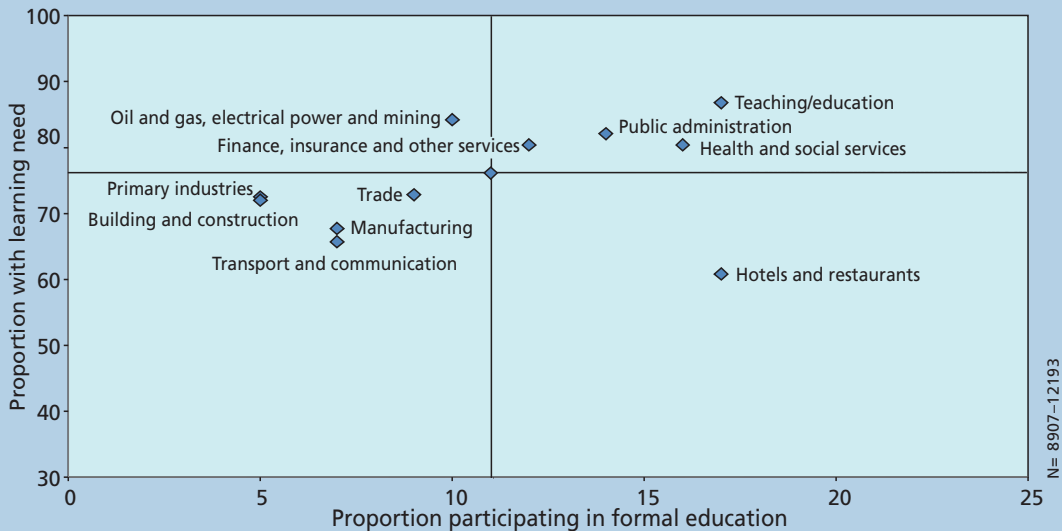


■ Among those who want to take more training or education, the biggest interest is in subjects in the group «social sciences, business studies and law». About 14 per cent of all employees between 22 and 66 want to take training in this overall field. Next-greatest is interest in subjects in the group «natural sciences, mathematics and ICT». Third is «medicine, other health disciplines and social services subjects».

■ Within each of these main areas, there are some individual courses or disciplines that stand out. Among those who want training within the main field «social sciences, business studies and law», almost half say that they want training or education in administration and management. Interest in the main area «natural sciences, mathematics and ICT» is especially due to the interest in ICT. In the third main area, there are many wanting training or education in medicine or nursing.

Those who participate most in education and training also feel the greatest need for learning

Learning needs and participation in formal education, by industry. Percentage



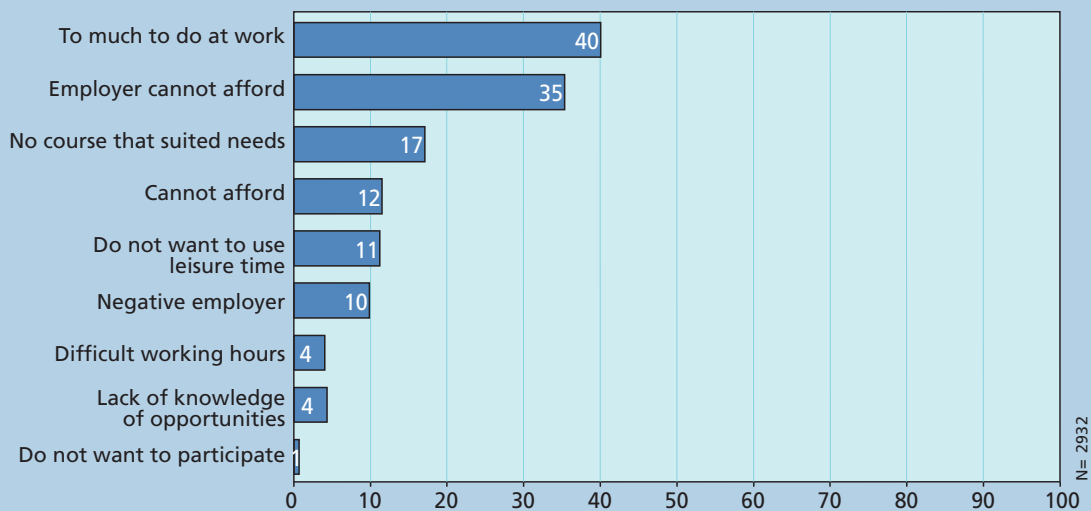
■ Those who experience a great need for new knowledge and skills also participate more than others in education and training. In the sectors of the economy in which the felt learning need is great, there are more people participating in formal education. Teaching, health and social services, public administration and financial, insurance and other services are industries characterised by a great learning need and a high level of participation in formal education. In building and construction, transport and communications, the primary industries, manufacturing and trade, both learning needs and participation in formal education is lower. An industry that stands out from the main pattern is hotels and restaurants, where the employees participate more in formal education than one would expect on the basis of learning needs.

The explanation is probably that many employees have a temporary and loose affiliation to their industry and are in the process of qualifying themselves for other occupations.

■ Participation in courses, seminars and other training is even more closely linked to the employees' experienced learning needs. This can mean that participation in this kind of training is to a greater extent than formal education powered by learning needs at work. Employees in the hotel and restaurant industry feel the least need for training and also have the fewest participants. At the opposite extreme we find employees in oil and gas, mining, public administration and education, all industries with a big learning need and high participation.

Finance and lack of time are the biggest obstacles to participation in training

Proportion of employed who encounter various obstacles to participation in education and training. Percentage



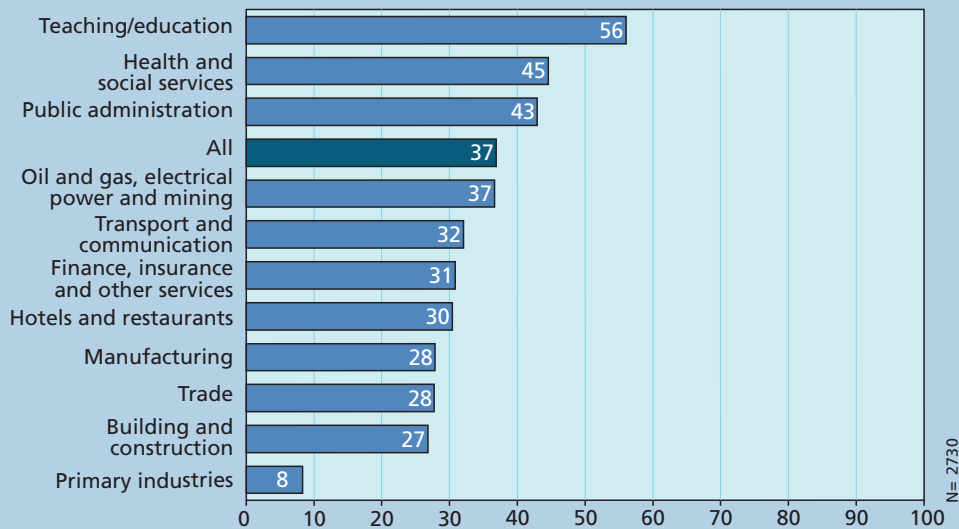
■ The most frequently cited reason for employees participating less in training and education than they would like is that there is too much to do at work. Four out of ten cite this as one of the two most important obstacles to participation in training. Next most important is that the employer cannot afford or lacks the opportunity to offer training. In other words, the main obstacles are job-related.

■ Supply-side factors may also contribute to failure to meet training needs. Of employees in the age-group 22 to 66, 17 per cent thought that there was no training course that suited their needs, and saw this as an important obstacle to participation in training.

■ Very few emphasise more personal obstacles such as not having the money, not wanting to use their leisure time, or simply not wanting to participate in training.

Different obstacles in the private and public sectors

Proportion of employed who feel that poor employer finances is an obstacle to participation in education and training, by industry. Percentage



- Too much to do at work, and an employer who cannot afford or lacks the opportunity to offer training, are the two most important obstacles to participation in training.
- If the obstacles are by and large the same for everyone, the emphasis on lack of time and poor finances varies somewhat between different industries. Workers in the public sector experience limited training resources at their employer's as the most important obstacle to participation. This applies in the health and social sector, in the educational sector and in public administration. In the private sector, however, time pressure at work is a bigger obstacle than the employer's being unable to afford or offer training.

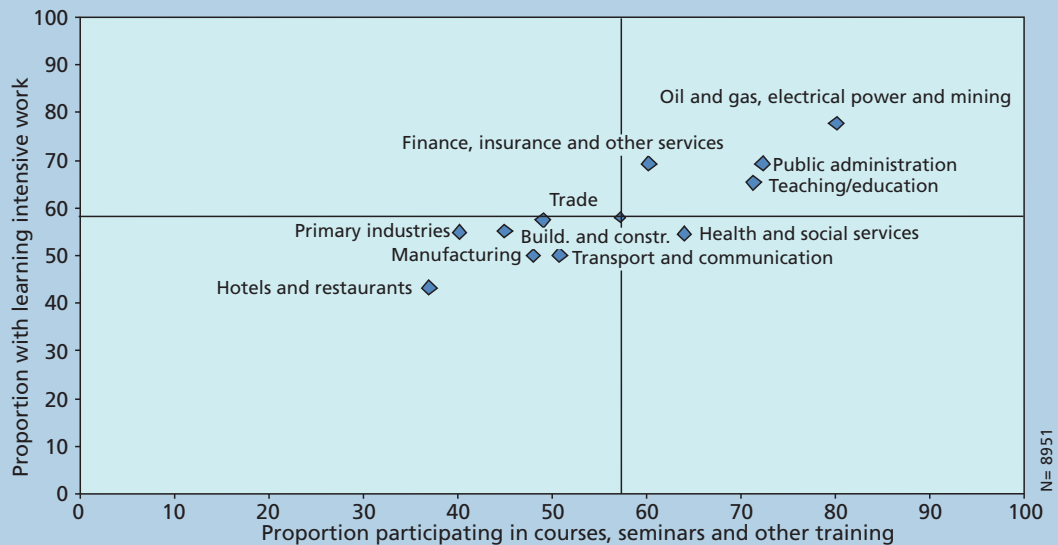
- The proportion of people participating in training with finance from the employer is higher in the public sector than in the private sector. The fact that many people in the public sector nevertheless cite the employer's finances as an important obstacle may have several causes. The felt training need in large parts of the public sector is great, and it may be that a somewhat higher participation is still not enough to meet it. Again, it may be that public-sector employees are for various reasons more oriented to formal courses of education, which are also more expensive. A third explanation is that learning in these industries often takes place via courses, seminars and so forth. Participation in training for employees of the education sector or health and social services sector often requires others to substitute for those participating, which also makes the training more expensive.

Chapter 6

Learning conditions profiles

Different learning profiles in the industries

Participation in training and learning-intensive work, by industry. Percentage



- The development of skills follows different patterns in different industries. Some industries are based, for example, on constant replacement of young labour, others make more effort to train the labour they already have. In order to illustrate the differences, a good point of departure is to look at the relationship between participation in training on the one hand and how learning-intensive the work is on the other.
- In industries where many have learning-intensive work, there are also often many people participating in training. Similarly, there are usually few people participating in training in industries where few have a learning-intensive job. There are, however, exceptions: the centre of gravity of some industries is in training programmes – in others, workers learn through the everyday work. Formal further training is generally a consequence of individual initiative and is to a lesser extent a part of the employer’s strategy for skills development; but

here, too, there are exceptions in certain industries.

- These factors are crucial preconditions for the individual employee’s learning. In addition, there are other factors affecting the learning conditions, either by affecting participation in training and education or, similarly, through affecting the intensity of learning at work. All these factors can be included to characterise an industry’s *learning conditions profile*, but to simplify the presentation, we will lay the main emphasis on participation in training and the intensity of learning at work when describing the various industries’ learning conditions profiles.

Six learning conditions profiles

Six learning conditions

● Good learning conditions	(oil and gas, electrical power, mining, in part public administration)
● Poor learning conditions - life-phase work	(hotels and restaurants)
● Learning as training	(health and social services, in part education)
● Learning through work	(financial, insurance and other services)
● Several forms of learning, but average or poor learning conditions	(manufacturing, transport and communication, building and construction, trade)
● The self-employed	(primary industries, and other self-employed)

■ The Learning Conditions Monitor provides a data basis for outlining six *learning conditions profiles* of the industries. A learning condition profile is a particular composition of learning conditions that affects the development of skills in that industry.

1. Good learning conditions – learning-intensive work and a lot of training

Oil and gas, electrical power and mining stand out with a high proportion of learning-intensive jobs and a high level of participation in training and education, of which the bulk is in the form of courses, seminars and other training that does not yield formal qualifications. The good learning conditions may be due to certificate and safety requirements, or be a consequence of a conscious choice. Public administration can also be placed in this category. Even if far fewer than in oil and gas, electrical power and mining participate in training or have learning-intensive work, public administration is among the highest in participation in training and in learning-intensive work. Nor does the public administration have any clear centre of

gravity in either training or learning through the ongoing work. Even so, public administration distinguishes itself from oil and gas, electrical power and mining in that far more participate in formal education. In both industries, there are many who feel a need for learning, and many who receive good learning support and encouragement from their superiors.

2. Poor learning conditions – life-phase work

The hotel and restaurant business as a whole can be characterised as an industry in which there is little investment in learning and competence development in comparison with the rest of working life. Employees of the hotel and restaurant business participate the least in courses and other training of all workers, and they have the least learning-intensive workplaces. Fewer people than in other industries feel a need for learning, and under half receive good learning support and encouragement from their superiors. The industry is characterised by its employment of many young workers on their way to other industries, and therefore probably has less incen-

tive to develop its labour force. In the hotel and restaurant industry, many participate in formal education, but this is primarily on the individual's own initiative, usually in order to get out of the business. An interesting contrast is trade, which also has an element of life-phase work and employs many younger workers, but distinguishes itself from hotels and restaurants by having a much more learning-intensive work and a higher rate of course participation.

3. Learning mostly as training

In the health and social services sector, competence development is «tilted» towards training and education. Whereas the sector is over average in course participation, it is below average in share of learning-intensive jobs. It is particularly the learning opportunities at work, which are the poorest of all the industries, that pull the learning intensity at work down. Given the relatively high educational level in the sector, it might be expected that the work was more learning-intensive. The teaching sector is higher than health and social services in both training participation and learning intensity at work, and cannot be characterised as a sector with little learning-intensive work because of high learning requirements. Even so, it has some clear common features with health and social services. The education sector also has its centre of gravity in training and education rather than learning through work and less learning-intensive work than one might expect, given the very high educational level in the sector. In both industries, there are many who feel a learning need and who consider that they participate too little in training.

4. Learning mostly through work

Financial, insurance and other private services have the opposite profile to health and social services and the educational sector. The centre of gravity in the development of skills is learning through the job itself. The learning requirements are high and the learning opportunities are experienced as good. A high proportion of the employees therefore have learning-in-

tensive jobs, while there is relatively speaking less participation in training. In the same way that the educational sector cannot be characterised as an industry with little learning at work, financial, insurance and other services cannot be characterised as an industry with low participation in training. Participation in courses, seminars and other training is somewhat over average for working life. Even so, there are fewer who participate in training than in other sectors with a corresponding high educational level.

5. Several learning forms, but average or poor learning conditions

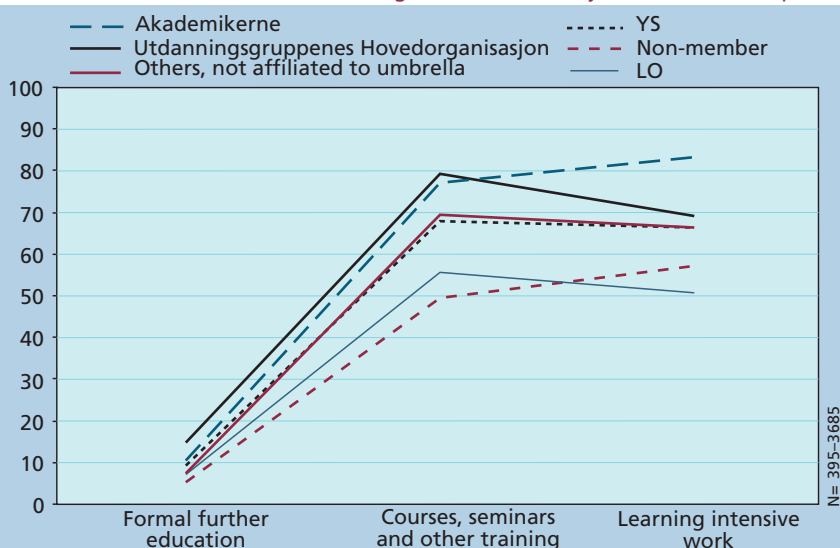
The majority of the industries in the private sector are somewhat under the average for working life, both in training participation and learning intensity at work, without our being able to say that the competence development has its centre of gravity in any of the directions. Manufacturing, transport and communication, building and construction and trade can all be placed in this category. Of these, trade and building and construction have more learning-intensive work than manufacturing and transport and communications. In most of these industries there are fewer who feel a learning need than in working life in general. Learning support from superiors is around average or somewhat below. All the industries have a relatively low share of employees with higher education. None of them seem to any particular degree to invest in formal further education.

6. Self-employed

Primary industries and the self-employed in other industries participate little in training, but have quite learning-intensive work, in line with the more learning-intensive industries in the private sector, such as building and construction. The low training participation is due largely to these individuals having more difficulty than employees in organising their work so that they can take time off from production to participate in training

Union members participate most in training and education

Proportion who have participated in further education and training last year and proportion with learning-intensive work, by union membership. Percentage



Members of trade/labour unions participate more in formal further education and courses, seminars and other training than do other workers. Nine per cent of union members have participated in formal further education, as against five per cent for non-members. Sixty-four per cent of union members have participated in courses, seminars and other training, as against 49 per cent of non-members. Members and non-members have almost equally learning-intensive work; 60 per cent of the members have learning-intensive work, as against 57 per cent of the non-members. Some of the explanation is that the membership rate is higher in those sectors and industries in which there is a high proportion of learning-intensive jobs and a high proportion participate in training, but even within the same industry, union members participate more in training. Joining a trade union may be an expression of a commitment and interest that also results in a greater will to participate in training. In some cases, too, it may also provide more knowledge of and better access to relevant facilities.

The difference in participation rates between the main union umbrella organisations reflect principally the differences in the membership. The umbrellas that organise the highly-educated, such as the Federation of Norwegian Professional Associations (Akademikerne) and the Confederation of Higher Education Unions (UHO), have a higher proportion of all forms of learning among their members. The professionals of Akademikerne have the greatest number of members with learning-intensive work, which is something that we would expect, given the education level of the membership. Nor is it unexpected that the UHO members are leading in course participation and formal education. The members of the Norwegian Confederation of Trade Unions (LO) participate least in training and more rarely have learning-intensive work. In this field the LO members are clearly behind the members of the Confederation of Vocational Unions (YS), whereas the differences between the LO and the YS are smaller as regards formal further education.

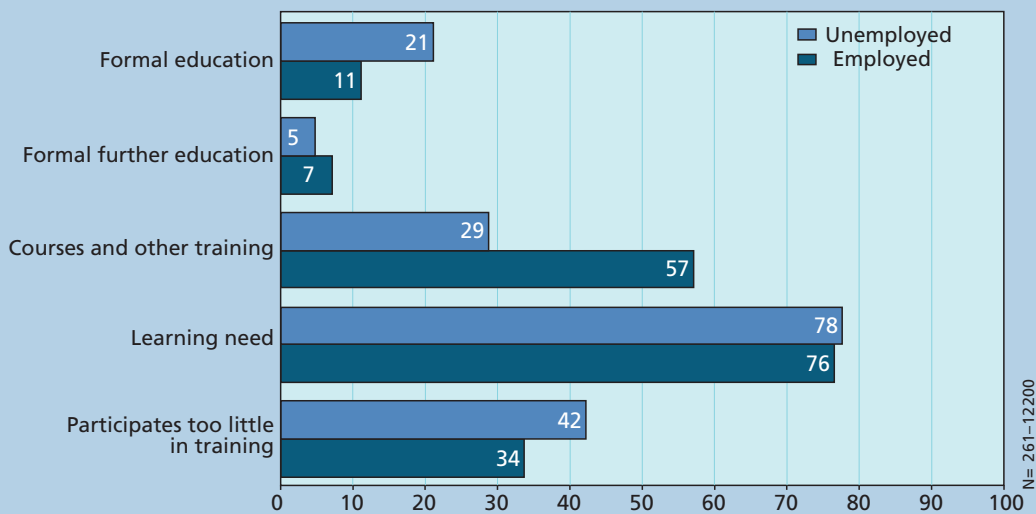


Chapter 7

Groups with weak learning conditions

The unemployed participate less in training than the employed

Proportion who has participated in education and training, proportion with learning needs, and proportion who participates too little in training, among unemployed and employed. Percentage



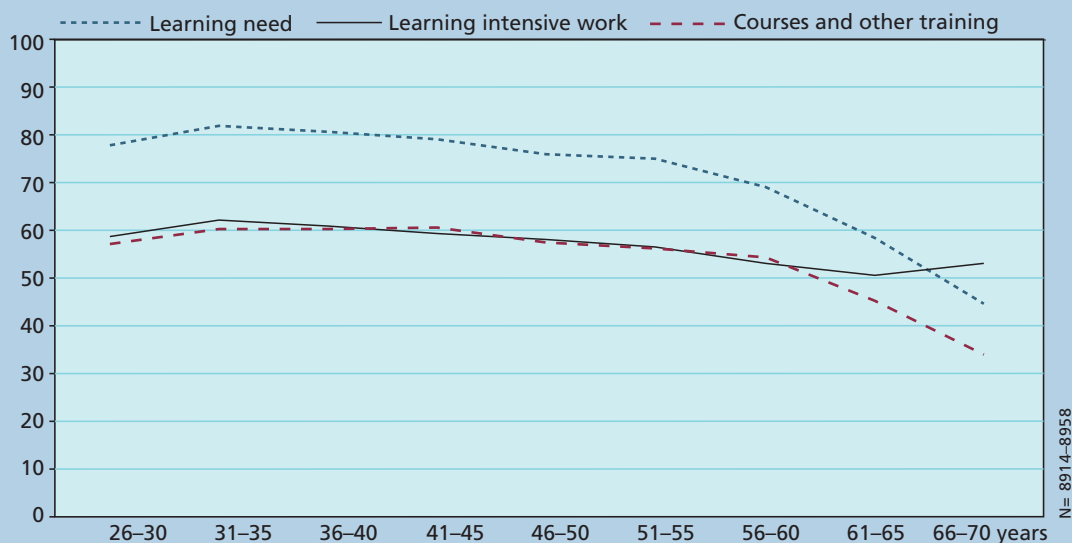
- The unemployed participate in formal education to a greater degree than those in jobs. Twenty-one per cent of the unemployed (in the age-group 22-66) participated in formal education in the last twelve months. Little of this can be characterised as further education. Only five per cent of the unemployed have participated in further education, as against seven per cent of the employed. The higher the educational level of the unemployed, the more he or she participates in formal education.
- Working life is an important learning arena. Special measures for the unemployed do not compensate for the disadvantage to the unemployed person of standing outside working life's cornucopia of courses, seminars and other training. The unemployed participate materially less than the employed in courses, seminars and other training that does not provide formal qualifications. Of the unemployed in the age-group 22-66, 29 per cent participated in such training, as against 57 per cent of the employed. Also among the unemployed, the enterprises are the most important suppliers of training,

with more than a third of the training measures, followed by private schools/course organisers and the Labour Market Service (A-etat) with a fifth each. The training measures for the unemployed last slightly longer than those for the employed, but a majority of the training measures last less than a week.

- A heavy element of formal education in the total development of skills among the unemployed can be explained partly in terms of a lower educational level among the unemployed, and partly in terms of the unemployed perhaps having a special need to document the competence enhancement vis-à-vis potential employers.
- The unemployed feel a learning need to about the same degree as the employed, but to a greater extent feel that they participate too little in training. Most of the employed prefer to have their skills needs met through practical experience and work experience on the job. The unemployed wish less frequently than the employed to take training through short courses.

Older employees participate less in training

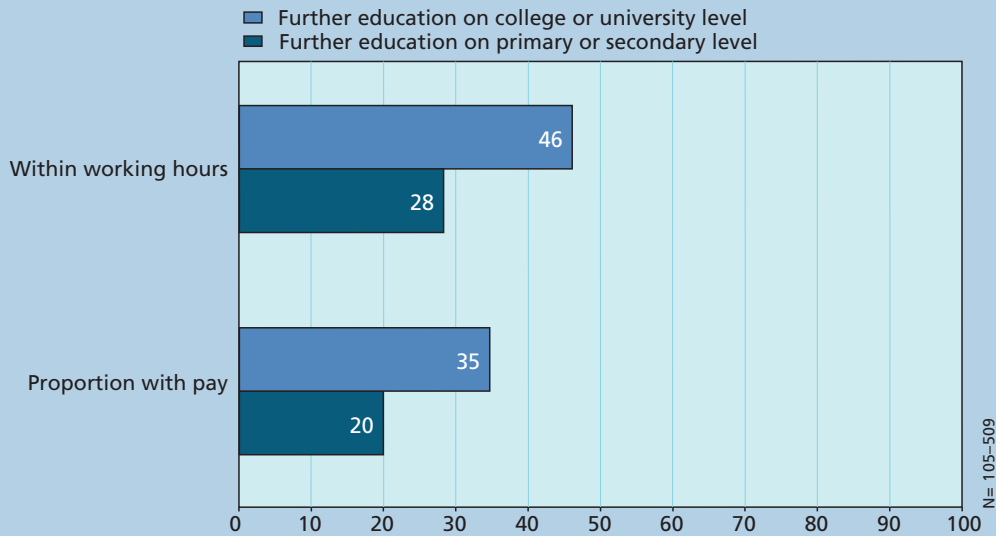
Proportion of employed who has participated in training, proportion with learning-intensive work and proportion with learning needs, by age. Percentage



- The share of employees participating in courses, seminars and other training does not begin to fall sharply until the age of 60. In all, 50 per cent of the employees aged 55 or older have participated in training in the last year. That figure is somewhat lower than in working life as a whole (57 per cent), but not much lower. Measured in number of hours' training per year, the difference is greater. Employees aged 55 and upwards spend two-thirds as many hours (17 hours) as other employees, whereas those aged 60 and upwards spent only half as many hours (13 hours).
- Older workers have rather less learning-intensive work than employees in their thirties and forties. In all, 50 per cent of the employees aged 55 or upwards have learning-intensive work, which is somewhat lower than in working life as a whole (58 per cent).
- Older employees have slightly poorer learning conditions than younger employees, even when they have equal levels of education.
- Older employees have a lower average educational level than younger employees. One reason for the difference between older and younger workers not being greater than it is, is that employees with low levels of education often leave the workforce when they are around 60. The group that remains in working life in their sixties are therefore to some extent a «selected» group that participates more in education and has a more learning-intensive work than those who left working life earlier.
- Older employees feel a much smaller learning need than others, and are less likely to feel that they are participating too little in training. Older employees prefer to a greater degree than young employees to learn through taking short courses, and are less oriented to formal education or practical work experience. Lack of time and a negative employer are less important obstacles to participating in training for older employees than for others.

Lifelong learning – mainly for the highly-educated?

Proportion of participants who take further education in working hours or with finance from employer, by level of education activity. Percentage



- Employees without higher education derive much less benefit from lifelong learning in employment. They participate considerably less in further education and in courses and other training. They also have a less learning-intensive work than others. The learning requirements are less and the learning opportunities in day-to-day work are slightly poorer. The intensity of learning in the work itself does not, therefore, contribute to evening out the differences between employees with higher education and employees with only a primary or secondary education.
- There are many reasons why employees with a primary or secondary education come off worse than those with higher education. Employees without higher education are less inclined to seek new skills. They feel less need for new knowledge and skills, and feel less lack of training. Some of the reason is that employees without higher education are often in jobs

where there are lower requirements for learning on the job, but even when the learning requirements are the same, they feel less need for learning.

- Nevertheless, seven out of ten employees with primary or secondary education feel a need to learn more. Many of them, however, are encountering higher barriers to learning than the highly-educated do. This applies particularly to those with a need to take basic education. Such education must more often than other education be taken outside working hours and is more rarely financed by the employer. Even with courses and other training that does not provide formal qualifications, employees with a primary or secondary education must more often study outside working hours and more often without pay. Enterprises are therefore investing rather less in training of employees with a low educational level, particularly when they want to strengthen their basic education.





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