# Education and knowledge 

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## The Danish education system

The ordinary education system comprehends education ranging from $0^{\text {th }}$ grade to long-cycle higher education and Ph.D. degrees. The figure below gives a picture of how the education system is structured. The scale on the left side shows the minimum amount of years a student has been educated to complete the actual education level. It is also possible to see, the age of a student on a certain educational level provided that the student has started in pre-school class as a 6-year old, has not had any breaks and has gone through the educational system at the normative time. The scale on the right side shows the different educations' placement in the international education nomenclature ISCED.

Beside the ordinary educational system, there is the educational system for adult. The educational system for adult is distinct from the ordinary system by consisting of short courses and part-time education. Typically this education system consists of isolated courses, which in some cases can be combined into a full qualification equivalent to the qualifications of the ordinary system.

Figure 1
Number of students in the educational system. 1 October 2014


[^0]
## Population by status of education

## Increase in the level of education

In 2014, 70 per cent of the 30-69-year-olds had completed education providing them with professional qualifications, defined as vocational or higher education aimed at specific types of jobs. The proportion was 63 per cent in 2004. There is an equal distribution between men than women who have completed education courses providing them with professional qualifications.

## High frequency of vocational education

The highest level of qualifications among the 30-69 age group was most frequently a vocational education. 38 per cent had completed this type of education, while 33 per cent had completed a higher education in 2014. In 2004, 37 per cent of the 30-69-year-olds had completed a vocational education and 27 per cent had completed a higher education.

Among the remaining 30 per cent of the 30-69-year-olds of the population, 21 per cent had completed basic school education, 5 per cent general upper secondary education as the highest level of education, while there is no information for the last 4 per cent.

## Regional differences

Regional differences are evident with regard to educational patterns within the Danish population in 2014. There is, however, a trend for the highest proportion completing education courses providing them with professional qualifications to be found around the large cities, with correspondingly lower proportions being evident in the provinces.

Over the recent decade, differences have been sharply evened out as many outlying districts have experienced a higher increase than the major urban areas. Large differences still exist within each region.

Figure 2
Education providing professional qualifications among 30-69-year-olds in per cent


## Sharp divisions in educational patterns between the sexes

Sharp distinctions were observed in the educational patterns for 30-69-year-old men and women with regard to both educational levels and fields. More men than women had completed vocational education or long-cycle higher education in 2014, whereas more women than men had completed medium-cycle higher education in the same year. The difference in long-cycle higher education has become less pronounced during the last ten years, and since 2003 more women than men have finished a Master's degree.

Figure 3
30-69-year-olds with vocational education as the highest education completed

www.statbank.dk/hfu1 and krhfu1

Among the vocational educations, there are major male-dominated disciplines such as iron and metal (e.g. mechanic, blacksmith), construction (e.g. carpenter and electrician), transport, agriculture (e.g. driver and farmer) and the graphic area (e.g. graphical). Commercial and office (e.g. assistant), engineering and industry (e.g. technical designer), pedagogy, service (e.g. hairdressing) and health (e.g. social and health care) is however dominated by women.

## Most medium-cycle courses are dominated by either men or women

As far as medium-cycle education is concerned, three in ten disciplines were sharply dominated by men: These were technical (e.g. building technicians and engineers), transport (e.g. marine engineers and shipmasters) and public security education. However, three disciplines (pedagogy, the food sector, and the health sector) are dominated by women. Among the major courses are, for example, school teachers and trained nurses.

## Long-cycle higher education is more mixed

As far as long-cycle higher education is concerned, particular two disciplines (technical and defense) were dominated by men, whereas the distribution between men and women were more equal in the following disciplines: agriculture, social studies, artistic studies, and medical studies (e.g. physicians).

Figure 4 30-69-year-olds with long-cycle higher education by field

www.statbank.dk/hfu1 and krhfu1

## Full time education

## Pre-school to 10th

Basic school forms the foundation of the Danish educational system. It begins with pre-school class and leads up to the voluntary 10th school year. In 2014, 710,000 pupils attended basic school. Of these, 66,900 had started in pre-school class, while 174,200 attended 8th to 10th grade, and among these, 27,750 attended continuation schools.

## Higher number of students attending medium-cycle higher educations

In total267,600 students are attending higher educations in 2014 - not including Ph.D. students. The largest part, 34 per cent, is attending the medium-cycle higher educations, followed by bachelor and long-cycle higher educations by 31 and 26 per cent respectively. The smaller part is accounted for by the students at short-cycle higher educations with 10 per cent of the attending students.

Typically, a short-cycle higher education can be taken at Business and Technology Academies and comprises educations such as estate agent, market economist and computer scientist. The medium-cycle higher educations are offered by University Colleges and comprise educations such as school teacher, social worker, nurse and pedagogue. Bachelor- and long-cycle higher educations are most often offered by the universities.

## Increase in students in vocational educations

The number of students in vocational educations has increased by 5 per cent and by 34 per cent in higher educations from 2004 to 2014. In 2014 there were 131,100 students in vocational educations and 267,600 students in higher educations, such as policeman, nurse or doctor. Ph.D.-students are not included in this figure.

Figure 5 Students attending education and training providing profess. qualifications

www.statbank.dk/u11 and u1107

## Courses and adult education

## Adult education at almost all levels of education

Outside the main educational system, there are a number of public-managed courses providing formal qualifications. Adult education courses covering almost all levels of education within the ordinary education system are available.

In the school year 2012-13, nearly 1.2 million course participants completed their participation in public-managed adult or supplementary courses, and course participants at adult vocational training constituted 56 per cent of these. Course participants at general courses, i.e. 8th and 9th form and higher preparatory course, constituted 34 per cent, while course participants at further education constituted 10 per cent, respectively.

38 per cent of the course participants had vocational training as highest education completed, 30 per cent had basic school, 7 per cent had general upper secondary school, 9 per cent had unknown education stated, and 16 per cent had completed a higher education.

## 6 out of 10 of the course participants at general courses were women

51 per cent of the participants in public courses were women. The proportion of women at the general courses was 59 per cent, while the corresponding figure at the adult vocational training centres was a mere 45 per cent. At the higher education centres, 59 per cent were women.

## Educational performance

Eight out of ten young people are in education immediately after primary school
Of all students leaving school in 2013-14, 82 per cent had commenced further education after a period of three months. 63 per cent had chosen to attend general uppersecondary education or vocational education (general programmes of education at second level, second stage, hhx, htx), while 19 per cent opted for vocational education and training, e.g. carpenters, bricklayers or hairdressers.

Figure 6 Students three months after leaving basic school

www.statbank.dk/afgang11
48 per cent of the students leaving school in 1994-95 attended traditional general upper-secondary education or vocational general upper-secondary, while 16 per cent opted for vocational education and training within a period of three months after leaving basic school. In the period from 1994-95 to 2013-14 there has been an increase in the proportion of young people choosing an upper-secondary education, while relatively fewer young people choose a vocational education. The proportion of young people who are not enrolled in education three months after leaving primary school has decreased from 21 per cent to 16 per cent during the ten year period.

21 per cent of students who graduated from traditional general upper-secondary education in 2013-14 continued their education immediately after completing their general upper-secondary education. The corresponding proportion of graduates from 2003-04 was 23 per cent. The proportion of graduates from 2013-14 who continued their education immediately after graduating from vocational general uppersecondary education was 35 per cent.

82 per cent of the graduates from general upper-secondary education or vocational education in 2013-14 who had enrolled for further education three months after their graduation chose higher education.

## Ten years after basic school half of the Danes have profess. qualifications

Ten years after leaving basic school in 2003-04, about 47 per cent had completed training providing them with professional qualifications. Of this group, 24 per cent had completed a vocational education course and 23 per cent had completed higher education, while 30 per cent were still studying. The educational remainder - young people who had not attended any educational institution or had completed an education course providing them with professional qualifications ten years after leaving basic school - accounted for 18 per cent of the year 2003-04.

## Education has a significant effect on employment

In 201367 per cent of the age group 30-69 years were employed, 3 per cent unemployed, 27 per cent outside the workforce and 2 per cent under education. Persons with professional qualifications have a higher employment rate than those without professional qualifications. Higher levels of education can lead to better employment.

Figure 7
The relation to the labour market for the 30-69-year-olds. 1 January 2013


With professional qualifications from education

- Students
- Employed
- Unemployed
- Outside the workforce

Without
professional qualifications from education

## Education in an international perspective

## Level of education in Denmark above OECD average

In all OECD countries, an average of 32 per cent of the 25-64-year-olds had completed a higher education in 2012. At 35 per cent, Denmark was among OECD countries above average percentage. The three highest percentages were found in Canada, Japan, Israel, while Italy, Turkey and China accounted for the lowest percentages.

## Danes proceed through 18.4 years of education

Children that began primary education in Denmark in 2012 will proceed through an average of 18.4 years of full time education during their lifetime. Ireland, Iceland, Australia, New Zealand and Finland are topping the list with Denmark, all accounting for 18 years of education or more. Among countries lying around 15 years of education are Slovakia, Russia and Brasil. The OECD average was 16.9 in 2012.

Figure 8 Persons having completed tertiary education in selected OECD countries. 2012


Source: OECD, Education at a glance 2014.

## Research, development and innovation

The private sector contributes with two thirds of total R\&D-expenditure
Research and development as well as innovation activities are important factors for the development of the competitiveness of the firms and, consequently, for economic growth in society. The creation of new knowledge and its subsequent use in the enterprises are important factors for the dynamics and innovation of the business sector by way of introducing new products and productionprocesses.

R\&D activities take place both in the private and the public sector. Total Danish R\&D expenditure in the public and private sector has doubled in the period 20002013 and has been estimated at DKK 58 billion in 2013. The private sector's share of total R\&D expenditure has been approximately two thirds during the period.

Figure 9 R\&D expenditure of the public and private sector


## Manufacturing has the highest R\&D expenditure

R\&D expenditure is particularly high in manufacturing and total expenditure on own R\&D activities reached DKK 21.4 billion in 2013. This amount corresponds to 58 per cent of the private sector's expenditure on $R \& D$.

The remainder of private sectors R\&D expenditure is dominated by the industries business service, information and communication, and finance and insurance. Enterprises in business service accounted for R\&D expenditure amounting to DKK 5.9 billion (16 per cent) in 2013. Information and communication (television and radio, telecommunication and ICT and information services etc.) accounted for 4.0 DKK billion ( 11 per cent) and finance and insurance also for DKK 4.0 billion or 11 per cent.

Figure 10 Percentage of innovative enterprises by industry. 2011-2013


## 46 per cent of all enterprises are innovative

The greater majority of Danish enterprises do not carry out research and development activities. Instead, they attempt to increase their competitiveness by introducing new products and production processes, or by introducing new organisational methods or marketing initiatives, i.e. innovation. 46 per cent of the Danish enterprises have introduced innovations during the period 2011-2013.

Innovative enterprises are found primarily among businesses in information and communication where 60 per cent innovated during 2011-2013.

The innovation activities of Danish enterprises are characterized by large industrial variation. Enterprises in information and communication have more innovation in products than in processes, whereas enterprises in construction to a larger degree introduce new production processes.

Enterprises in manufacturing industry have almost the same frequency in product and process innovation ( 21 per cent and 22 per cent respectively). Total innovation expenditure amounted to DKK 45.6 billion in 2013, of which DKK 37.3 billion was used for own R\&D. In addition Danish enterprises purchase of R\&D-services amounted to DKK 17.1 billion in 2013.

## Information society

## About the information society

An analysis of the information society can be made partly via the supply side in the form of enterprises and employment in the ICT sector and partly via the demand side in the form of the use of information technology by enterprises, the public sector and by individuals.

## The ICT sector

The ICT sector comprises enterprises that produce products and services within electronics, ICT, computer software, telecommunications, and other areas primarily based on information technologies. The ICT sector can be divided into ICT manufacturing, ICT wholesale, telecommunications, and ICT consultancy services.

## Fall in employment in ICT manufacturing

In 2012, the Danish ICT sector employed a total of 83,626 full-time employees, which is minor decrease of 5 per cent compared to 2007 . However, there was a fall in ICT manufacturing of 46 per cent and an increase of 7 per cent In ICT services, consultants, etc. Out of total employment in ICT manufacturing, 60 per cent was employed in ICT services, 18 per cent in telecommunications, 16 per cent in ICT wholesale and 6 per cent in ICT manufacturing.

Figure 11 Full-time employees in the ICT sector


## Use of ICT by enterprises

At the beginning of 2014, nearly all enterprises had access to the Internet and nine out of ten enterprises had their own website. Nine out of ten enterprises also had a mobile connection to the Internet.

Figure 12 Use of ICT by enterprises. 2013


Note: Broadband connection, connection faster than analog modem or ISDN.

## Danes own more and more ICT goods

An increasing number of Danish families have personal computers, access to the Internet and mobile phones. Since 2000, penetration of mobile phones has passed penetration of PC's. In 2014, 98 per cent of Danish families had a mobile phone, compared to 68 per cent in 2000. In 2014, 95 per cent of families had access to a computer at home, compared to 60 per cent in 1999.

Figure 13 Families' access to ICT goods


Note: 1 January.
www.statbank.dk/varforbr

## Eight out of ten Danes use a computer daily

The proportion of Danes between 16 and 74 years old, sitting in front of a computer screen every day or almost every day has been steadily increasing for the past nine years and account for 82 per cent in 2014. As more and more people use the computer, the share of those who have never used a PC has become less. In 2014 this proportion is 2 per cent of the 16-74 year olds.

## Young people are the most frequent users of the computer

The proportion of Danes who use a computer daily or almost daily declines with age. 85 per cent of the 16-64 year olds sitting at the keys every day, while only 67 per cent of those aged 65-74 and 36 per cent of the 75-89 year olds use a computer daily or almost daily.

Figure 14 Access to the Internet at home. 2014


Table 136 Students in the educational system. 2014

| 1.10.2013-30.09.2014 | Students 2013 | Entrance | Graduates ${ }^{1}$ | Did not complete education | Students 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 1260198 | 401412 | 228243 | 170476 | 1262891 |
| Basic school/preparatory | 717506 | 168191 | 85932 | 84310 | 715455 |
| General upper-secondary education | 149146 | 59385 | 47087 | 12751 | 148693 |
| Vocational education and training | 135249 | 73839 | 33100 | 44859 | 131129 |
| Short-cycle higher education | 23671 | 14066 | 7654 | 4408 | 25675 |
| Medium-cycle higher education | 87278 | 30208 | 19513 | 8099 | 89874 |
| Bachelor | 81151 | 29559 | 17575 | 11420 | 81715 |
| Long-cycle higher education | 66197 | 26164 | 17382 | 4629 | 70350 |
| Men, total | 628073 | 200590 | 108359 | 89924 | 630380 |
| Basic school/preparatory | 369096 | 86318 | 43948 | 43224 | 368242 |
| General upper-secondary education | 69955 | 28278 | 21761 | 6759 | 69715 |
| Vocational education and training | 75744 | 40019 | 16372 | 25380 | 74011 |
| Short-cycle higher education | 12853 | 7748 | 3867 | 2690 | 14042 |
| Medium-cycle higher education | 33228 | 12323 | 7015 | 3837 | 34698 |
| Bachelor | 38589 | 14177 | 7924 | 5909 | 38934 |
| Long-cycle higher education | 28608 | 11727 | 7472 | 2125 | 30738 |
| Women, total | 632125 | 200822 | 119884 | 80552 | 632511 |
| Basic school/preparatory | 348410 | 81873 | 41984 | 41086 | 347213 |
| General upper-secondary education | 79191 | 31107 | 25326 | 5992 | 78978 |
| Vocational education and training | 59505 | 33820 | 16728 | 19479 | 57118 |
| Short-cycle higher education | 10818 | 6318 | 3787 | 1718 | 11633 |
| Medium-cycle higher education | 54050 | 17885 | 12498 | 4262 | 55176 |
| Bachelor | 42562 | 15382 | 9651 | 5511 | 42781 |
| Long-cycle higher education | 37589 | 14437 | 9910 | 2504 | 39612 |
| ${ }^{1}$ Entrance of pupils to basic school comprises entrance of pupils to 0 st to 6 th class and to 7 th and 10 th class. ${ }^{2}$ Graduates from basic school equal graduates from basic school with 9th or 10 th grade. <br> ${ }^{3}$ Ph.D. is not included in the table. |  |  | www.statbank.dk/u1107, u2107, u3107 and u4107 |  |  |



| Table 138 | Students enrolled in general education |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Entrance of students <br> 01.10.13-30.09.14 |  | $\begin{gathered} \text { Graduates } \\ 01.10 .13-30.09 .14 \end{gathered}$ |  | Disrupted educations |  | Students$01.10 .14^{1}$ |  |
|  | Men | Women | Men | Women | Men | Women | Men | Women |
| Total | 114596 | 112980 | 65709 | 67310 | 49983 | 47078 | 437957 | 426191 |
| Basic school/preparatory | 86318 | 81873 | 43948 | 41984 | 43224 | 41086 | 368242 | 347213 |
| Upper-secondary school | 13393 | 19855 | 10677 | 16932 | 2790 | 3397 | 36197 | 54485 |
| Higher preparatory examination | 4042 | 5115 | 2934 | 3894 | 1426 | 1416 | 7278 | 9383 |
| Adult upper secondary school | 183 | 279 | 123 | 177 | 77 | 106 | 272 | 448 |
| Entrance course to higher education | 25 | 121 | 16 | 66 | 11 | 39 | 32 | 157 |
| Higher commercial examination | 5999 | 4261 | 4335 | 3200 | 1183 | 729 | 15485 | 11011 |
| Higher technical examination | 3760 | 1328 | 2903 | 928 | 977 | 231 | 9806 | 3430 |
| Entrance examination to engineers | 876 | 148 | 773 | 129 | 295 | 74 | 645 | 64 |
| ${ }^{1}$ The newest number of students is equal to the old number of students plus the entrance of students www.statbank.dk/u1107, u2107 and u3107 minus those who either graduates or leaves without examination. |  |  |  |  |  |  |  |  |


| Table 139 | Students in upper-secondary education. 2014 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Completed educations |  |  | Average mark |  |  |
|  | Men | Women | Total | Men | Women | Total |
| Total | 21761 | 25326 | 47087 | - | $\bullet$ | - |
| Upper-secondary school | 10677 | 16932 | 27609 | 6.8 | 7.3 | 7.1 |
| Higher preparatory examination | 2934 | 3894 | 6828 | 6.3 | 6.2 | 6.2 |
| Adult upper-secondary school | 123 | 177 | 300 |  |  |  |
| Entrance course to higher education | 16 | 66 | 82 | 7.0 | 6.9 | 6.9 |
| Higher commercial examination | 4335 | 3200 | 7535 | 6.2 | 6.7 | 6.4 |
| Higher technical examination | 2903 | 928 | 3831 | 6.6 | 7.5 | 6.8 |
| Entrance examination to engineers | 773 | 129 | 902 | - | - | - |

www.statbank.dk/u3107

| Table 140 | Students in higher education |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Entrance of students 01.10.13-30.09.14 |  | $\begin{gathered} \text { Graduates } \\ 01.10 .13-30.09 .14 \end{gathered}$ |  | Disrupted educations |  | Students ${ }^{1}$$01.10 .14$ |  |
|  | Men | Women | Men | Women | Men | Women | Men | Women |
| Total | 45975 | 54022 | 26278 | 35846 | 14563 | 13993 | 118412 | 149202 |
| Short-cycle higher education | 7748 | 6318 | 3867 | 3787 | 2692 | 1716 | 14042 | 11633 |
| Educational | 1 | 35 | 3 | 31 | 1 | 8 | 4 | 83 |
| Communication and applied language | 1079 | 803 | 552 | 486 | 386 | 205 | 1813 | 1360 |
| The artistic | 16 | 17 | 10 | 11 | 6 |  | 44 | 67 |
| Social sciences | 4430 | 3545 | 2060 | 1959 | 1590 | 1008 | 8260 | 6150 |
| Technical | 1711 | 1316 | 901 | 872 | 551 | 351 | 3023 | 2689 |
| Food industry and home economics | 93 | 131 | 65 | 57 | 27 | 29 | 158 | 234 |
| Agriculture and fishing | 143 | 158 | 90 | 96 | 36 | 40 | 246 | 266 |
| Transport, etc. | 207 | 77 | 115 | 50 | 81 | 25 | 324 | 139 |
| Health care | 30 | 214 | 23 | 190 | 9 | 39 | 72 | 589 |
| Public security | 38 | 22 | 48 | 35 | 5 | 2 | 98 | 56 |
| Medium-cycle higher education | 12323 | 17885 | 7015 | 12498 | 3838 | 4261 | 34698 | 55176 |
| Educational | 2793 | 5660 | 1743 | 4516 | 1012 | 1434 | 9712 | 20494 |
| Communication and applied language | 325 | 479 | 256 | 213 | 81 | 135 | 1171 | 1391 |
| The artistic | 112 | 658 | 103 | 453 | 12 | 47 | 359 | 1365 |
| Natural sciences | 394 | 76 | 260 | 52 | 90 | 26 | 632 | 123 |
| Social sciences | 2076 | 3505 | 1005 | 1975 | 519 | 778 | 4366 | 9041 |
| Technical | 4181 | 1275 | 2194 | 637 | 1530 | 404 | 11580 | 3157 |
| Food industry and home economics | 109 | 576 | 62 | 430 | 45 | 136 | 349 | 1979 |
| Agriculture and fishing | 25 | 27 | 11 | 32 | 11 | 7 | 69 | 100 |
| Transport, etc. | 1081 | 62 | 537 | 28 | 215 | 16 | 2875 | 159 |
| Health care | 982 | 5494 | 566 | 4116 | 299 | 1274 | 2898 | 17194 |
| Public security | 245 | 73 | 278 | 46 | 24 | 4 | 687 | 173 |
| Bachelor | 14177 | 15382 | 7924 | 9651 | 5908 | 5512 | 38934 | 42781 |
| The humanities | 2912 | 5074 | 1466 | 3036 | 1636 | 2257 | 8370 | 14313 |
| The artistic | 233 | 237 | 156 | 204 | 60 | 42 | 686 | 767 |
| Natural sciences | 2554 | 1575 | 1287 | 920 | 1245 | 683 | 7194 | 4290 |
| Social sciences | 5364 | 5419 | 3291 | 3654 | 1900 | 1653 | 14177 | 14511 |
| Technical | 2151 | 1028 | 1067 | 520 | 812 | 307 | 5629 | 2772 |
| Food industry and home economics | 37 | 82 | 10 | 39 | 10 | 25 | 103 | 237 |
| Agriculture and fishing | 80 | 328 | 49 | 188 | 39 | 100 | 261 | 961 |
| Health care | 846 | 1639 | 598 | 1090 | 206 | 445 | 2514 | 4930 |
| Long-cycle higher education | 11727 | 14437 | 7472 | 9910 | 2125 | 2504 | 30738 | 39612 |
| The humanities | 166 | 713 | 134 | 467 | 148 | 514 | 692 | 2639 |
| The artistic | 1718 | 3564 | 1030 | 2407 | 404 | 764 | 4709 | 9640 |
| Natural sciences | 183 | 245 | 158 | 224 | 47 | 44 | 473 | 679 |
| Social sciences | 1714 | 1346 | 1007 | 790 | 320 | 189 | 4105 | 3245 |
| The humanities | 4685 | 5454 | 2907 | 3730 | 721 | 702 | 12983 | 14984 |
| Technical | 2348 | 1033 | 1621 | 840 | 419 | 179 | 5185 | 2437 |
| Food industry and home economics | 26 | 133 | 21 | 110 | 8 | 22 | 85 | 337 |
| Agriculture and fishing | 123 | 287 | 93 | 277 | 37 | 31 | 376 | 917 |
| Health care | 764 | 1662 | 452 | 1064 | 20 | 59 | 2130 | 4734 |
| Public security | 0 | 0 | 49 | 1 | 1 | 0 | 0 | 0 |

[^1]
## Table $141 \quad$ Participants in courses of adult and supplementary education. 2012/2013

| Public courses | Highest completed level of education |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Basic school | General upper secondary education | Vocational education and training | Short- <br> cycle <br> higher <br> education | Mediumcycle higher education | Bachelor | Longcycle higher ducation | Not stated | Total |
| Total ${ }^{1}$ | 354543 | 85834 | 450440 | 43597 | 95098 | 11937 | 41497 | 112565 | 1195511 |
| Participants in general and preparatory courses | 190575 | 38020 | 55627 | 5435 | 14515 | 3065 | 9494 | 91018 | 407749 |
| Basic school | 117679 | 7414 | 28526 | 2262 | 3526 | 1067 | 2237 | 56141 | 218852 |
| Of which: General adult education Danish lessons by language centres | 115426 2253 | 6811 603 | 27681 845 | 1595 667 | 3067 459 | 811 256 | 1718 519 | 23475 32666 | 180584 38268 |
| Preparatory education | 9051 | 6660 | 8550 | 2182 | 10018 | 1578 | 7003 | 32050 | 77092 |
| Of which: General and vocational courses Danish lessons by language centres | 8729 322 | 6460 200 | 8279 271 | 1356 826 | 9311 707 | 778 800 | 4672 2331 | 4445 27605 | 44030 33062 |
| Upper secondary education | 63822 | 23924 | 18505 | 982 | 970 | 419 | 252 | 2824 | 111698 |
| Of which: Higher prep. courses Entrance courses to long-cycle higher education | 63188 634 | 9543 14381 | $\begin{array}{r} 17702 \\ 803 \end{array}$ | 576 406 | 543 427 | 162 257 | 145 107 | 2202 622 | 94061 17637 |
| Vocational education at second level | 23 | 22 | 46 | 9 | 1 | 1 | 2 | 3 | 107 |
| Participants in vocational courses | 163968 | 47814 | 394813 | 38162 | 80583 | 8872 | 32003 | 21547 | 787762 |
| Vocational training and main courses Supplementary education of semi-skilled and skilled manual workers | 3383 156301 | 2106 33922 | 5614 364873 | 1560 24954 | 5816 30983 | 1111 3936 | 3432 8504 | 611 17476 | 23633 640949 |
| Of which: Manufact. and metal produc. Distributive trade, administration, communication and management | 23085 | 3386 16869 | 60462 113482 | 3622 12736 | 2499 | 303 | 771 | 3751 3363 | 97879 208531 |
| Service sector | 14587 | 2708 | 15640 | 1051 | 1416 | 163 | 334 | 2594 | 38493 |
| Construction, manufacturing Dairy industry and agriculture | 15777 4933 | 1658 459 | 27428 11193 | 1056 560 | 1053 419 | 85 46 | 218 119 | 1332 608 | 48607 18337 |
| Kitchens, hotels, restaurants, baker's shops and meat industry | 6433 | 1194 | 9758 | 641 | 1075 | 98 | 169 | 1047 | 20415 |
| Transport sector Educational, social and health services | 31466 9684 | 4483 1494 | $\begin{array}{r} 41169 \\ 59876 \end{array}$ | 2067 1127 | 4431 4921 | 248 192 | 573 315 | 3105 589 | 87542 78198 |
| Other courses | 10434 | 1671 | 25865 | 2094 | 1351 | 96 | 349 | 1087 | 42947 |
| Short-cycle higher education | 2233 | 3495 | 11773 | 3905 | 4212 | 640 | 2883 | 451 | 29592 |
| Medium-cycle higher education | 1877 | 6964 | 11804 | 7049 | 33521 | 1879 | 9239 | 1045 | 73378 |
| Bachelor | 18 | 356 | 89 | 151 | 381 | 228 | 526 | 319 | 2068 |
| Long-cycle higher education | 156 | 971 | 660 | 543 | 5670 | 1078 | 7419 | 1645 | 18142 |

[^2]www.statbank.dk/veugeo1

| Table 144 | Highest general education completed by population. 2014 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age on 1 January 2014 | 1-6 grade or unknown | 7-10 grade | Upper- secondary school, higher preparatory examination, adult upper-secondary school | Higher commercial education, higher tech. education, and entrance examination for technical colleges | Total |
| Total | 257080 | 2401589 | 988009 | 341465 | 3988143 |
| 15-24 years | 38619 | 480793 | 151197 | 54411 | 725020 |
| 25-29 years | 49623 | 130563 | 107556 | 45965 | 333707 |
| 30-39 years | 68021 | 294516 | 217324 | 107964 | 687825 |
| 40-49 years | 43086 | 443622 | 230153 | 92894 | 809755 |
| $50-59$ years | 40476 | 490054 | 174427 | 32585 | 737542 |
| 60-69 years | 17255 | 562041 | 107352 | 7646 | 694294 |
| Men | 130501 | 1294171 | 401763 | 178754 | 2005189 |
| 15-24 years | 18352 | 262726 | 56840 | 32707 | 370625 |
| 25-29 years | 24303 | 79314 | 40299 | 25283 | 169199 |
| 30-39 years | 35186 | 176055 | 79912 | 53810 | 344963 |
| 40-49 years | 22403 | 250380 | 92402 | 43181 | 408366 |
| $50-59$ years | 22320 | 252658 | 76624 | 18128 | 369730 |
| 60-69 years | 7937 | 273038 | 55686 | 5645 | 342306 |
| Women | 126579 | 1107418 | 586246 | 162711 | 1982954 |
| 15-24 years | 20267 | 218067 | 94357 | 21704 | 354395 |
| 25-29 years | 25320 | 51249 | 67257 | 20682 | 164508 |
| 30-39 years | 32835 | 118461 | 137412 | 54154 | 342862 |
| 40-49 years | 20683 | 193242 | 137751 | 49713 | 401389 |
| $50-59$ years | 18156 | 237396 | 97803 | 14457 | 367812 |
| 60-69 years | 9318 | 289003 | 51666 | 2001 | 351988 |

Table 145 Highest education completed analysed by age and sex. 2014

| Age on <br> 1 Jan. 2014 | Basic school General upperor not known secondary education |  | Vocational education and training | Short-cycle higher education | Medium-cycle higher education | Bachelor | Long-cycle higher education/ ph.d. | Unknown | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Total | 21,2 | 4,8 | 37,8 | 5,3 | 16,3 | 1,3 | 9,7 | 3,7 | 2929416 |
| 30-39 years | 14,7 | 6,0 | 32,2 | 6,1 | 16,4 | 2,7 | 14,5 | 7,4 | 687825 |
| 40-49 years | 17,8 | 5,9 | 39,0 | 6,2 | 16,3 | 1,4 | 10,4 | 3,1 | 809755 |
| 50-59 years | 24,5 | 4,6 | 38,4 | 4,9 | 16,5 | 0,7 | 7,5 | 2,8 | 737542 |
| 60-69 years | 28,1 | 2,6 | 41,3 | 3,8 | 16,0 | 0,5 | 6,3 | 1,5 | 694294 |
| Men | 21,3 | 5,0 | 41,1 | 6,1 | 10,9 | 1,3 | 10,3 | 4,1 | 1465365 |
| 30-39 years | 17,1 | 6,2 | 35,7 | 6,8 | 10,0 | 2,4 | 13,6 | 8,1 | 344963 |
| 40-49 years | 20,0 | 5,6 | 40,9 | 7,4 | 10,7 | 1,3 | 10,6 | 3,6 | 408366 |
| 50-59 years | 24,0 | 4,9 | 42,2 | 5,6 | 10,7 | 0,8 | 8,6 | 3,2 | 369730 |
| 60-69 years | 24,3 | 3,1 | 45,3 | 4,5 | 12,4 | 0,5 | 8,3 | 1,5 | 342306 |
| Women | 21,1 | 4,6 | 34,5 | 4,4 | 21,7 | 1,3 | 9,1 | 3,2 | 1464051 |
| 30-39 years | 12,3 | 5,7 | 28,6 | 5,4 | 22,8 | 2,9 | 15,4 | 6,8 | 342862 |
| 40-49 years | 15,4 | 6,2 | 37,0 | 5,0 | 22,0 | 1,4 | 10,3 | 2,7 | 401389 |
| 50-59 years | 25,1 | 4,4 | 34,6 | 4,2 | 22,4 | 0,7 | 6,4 | 2,3 | 367812 |
| 60-69 years | 31,8 | 2,1 | 37,4 | 3,0 | 19,6 | 0,4 | 4,3 | 1,4 | 351988 |


| Table 146 | Highest education completed analysed by region. 2014 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30-69 year-olds <br> Place of residence on <br> 1 Jan. 2014 | Basic school or not known | General uppersecondary education | Vocational education and training | Short-cycle M higher education | edium-cycle higher education | Bachelor | Long-cycle higher education/ ph.d. | Unknown | Total |
| Denmark, total | 621185 | 140745 | 1106871 | 154221 | 477941 | 38253 | 283158 | 107042 | 2929416 |
| Region Hovedstaden | 157664 | 60932 | 272544 | 47465 | 150487 | 19780 | 150913 | 45248 | 905033 |
| København | 47413 | 23027 | 62633 | 13108 | 46615 | 9687 | 60366 | 21029 | 283878 |
| Frederiksberg | 6111 | 4209 | 10694 | 2572 | 9300 | 1759 | 14540 | 3002 | 52187 |
| Region Sjælland | 104327 | 17677 | 189561 | 23229 | 67424 | 3463 | 25338 | 11769 | 442788 |
| Region Syddanmark | 147151 | 23401 | 259159 | 33049 | 103516 | 5623 | 34975 | 20485 | 627359 |
| Region Midtjylland | 138564 | 28504 | 258626 | 36312 | 110477 | 6938 | 53791 | 20153 | 653365 |
| Region Nordjylland | 73479 | 10231 | 126981 | 14166 | 46037 | 2449 | 18141 | 9387 | 300871 |


| Table 147 | Highest completed education, by labour market. 2013 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 30-69 year-olds | Students | Non-students |  |  | Total |
|  |  | Employed | Unemployed | Not in the labour force |  |
| Total | 66798 | 1980505 | 96505 | 793387 | 2937195 |
| Basic school/not known | 13318 | 352843 | 30973 | 342420 | 739554 |
| General upper-secondary education | 9391 | 95778 | 5676 | 30137 | 140982 |
| Vocational education and training | 17610 | 786372 | 36187 | 277821 | 1117990 |
| Higher education | 26479 | 745512 | 23669 | 143009 | 938669 |
| Men | 26609 | 1041339 | 51251 | 350429 | 1469628 |
| Basic school/not known | 5488 | 206368 | 17937 | 144699 | 374492 |
| General upper-secondary education | 4242 | 51135 | 3043 | 14337 | 72757 |
| Vocational education and training | 6774 | 447410 | 19874 | 133831 | 607889 |
| Higher education | 10105 | 336426 | 10397 | 57562 | 414490 |
| Women | 40189 | 939166 | 45254 | 442958 | 1467567 |
| Basic school/not known | 7830 | 146475 | 13036 | 197721 | 365062 |
| General upper-secondary education | 5149 | 44643 | 2633 | 15800 | 68225 |
| Vocational education and training | 10836 | 338962 | 16313 | 143990 | 510101 |
| Higher education | 16374 | 409086 | 13272 | 85447 | 524179 |

Table 148 The ICT sector in Denmark. 2012

|  | Enterprises | Full-time employees | Turnover | Wages and salaries |
| :---: | :---: | :---: | :---: | :---: |
|  |  | —_ DKK mio. |  |  |
| ICT industries, total | 12734 | 81626 | 194995 | 47685 |
| ICT manufacturing | 296 | 4954 | 9998 | 2365 |
| ICT wholesale trade | 1069 | 12728 | 57203 | 7600 |
| Telecommunications | 388 | 14975 | 46577 | 6661 |
| ICT services industries | 10981 | 48969 | 81217 | 31060 |


| Table 149 | Enterprises' use of ICT. 2014 |  |  |
| :---: | :---: | :---: | :---: |
|  | Internet access | $\begin{array}{r} \text { Own } \\ \text { web site } \end{array}$ | Mobile internet |
|  |  |  |  |
| All enterprises ${ }^{1}$ | 99 | 91 | 86 |
| Sectors |  |  |  |
| Manufacturing | 100 | 96 | 87 |
| Construction | 98 | 91 | 90 |
| Trade and transport etc. | 99 | 87 | 82 |
| Information and communication | 99 | 97 | 93 |
| Business service and finance | 99 | 93 | 88 |
| Fuldtidsansatte |  |  |  |
| 10-19 employees | 99 | 90 | 83 |
| 20-49 employees | 99 | 92 | 87 |
| $50-99$ employees | 100 | 95 | 93 |
| 100 employees + | 100 | 95 | 95 |

[^3]| Table 150 | Goods and services purchased on the Internet. 2014 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-89 years | Total |
|  | per cent of age group |  |  |  |  |  |  |  |
| Total | 89 | 89 | 85 | 82 | 69 | 61 | 37 | 78 |
| Tickets for events | 57 | 65 | 58 | 56 | 38 | 28 | 8 | 47 |
| Other tavel arrangements | 43 | 60 | 53 | 54 | 41 | 30 | 9 | 44 |
| Clothes, sports, goods | 64 | 62 | 56 | 44 | 25 | 15 | 5 | 42 |
| Holiday accommodation | 30 | 51 | 53 | 53 | 40 | 30 | 7 | 41 |
| Household goods (e.g. furniture, toys, etc) | 24 | 43 | 43 | 34 | 24 | 17 | 5 | 29 |
| Internet, television, phone subscription | 35 | 43 | 33 | 31 | 21 | 15 | 4 | 28 |
| Music, movies | 40 | 44 | 36 | 28 | 18 | 9 | 1 | 27 |
| Electronic equipment | 27 | 30 | 30 | 23 | 15 | 8 | 3 | 21 |
| Computer hardware | 25 | 28 | 26 | 26 | 16 | 9 | 3 | 20 |
| Books, magazines, newspapers | 20 | 26 | 22 | 24 | 17 | 13 | 5 | 19 |
| Video games software | 30 | 24 | 21 | 15 | 4 | 2 | 1 | 15 |
| Share purchases, financial services |  |  |  |  |  |  |  |  |
| or insurances | 14 | 21 | 14 | 14 | 9 | 8 | 2 | 13 |
| Food or groceries | 8 | 17 | 16 | 15 | 8 | 5 | 2 | 11 |
| Medicine | 6 | 8 | 7 | 10 | 9 | 9 | 4 | 8 |
| E-learning material | 9 | 10 | 11 | 8 | 4 | 1 | 1 | 7 |

www.statbank.dk/bebrit08

| Table 151 | Access to computer and internet in the home |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2010 | 2011 | 2012 | 2013 |
|  |  |  |  |  |


| Internet and telephony |  |  |  |
| :---: | :---: | :---: | :---: |
|  | first half $2010^{1}$ | first half $2012{ }^{1}$ | first half 2014 |
| Subscriber line, fixed network (1.000) ${ }^{2}$ | 2311 | 2088 | 1764 |
| Per 100 inhabitants | 41.7 | 37.4 | 31,3 |
| Mobile subscriptions ${ }^{3}$ (1.000) |  | 8284 | 8208 |
| Per 100 inhabitants ${ }^{3}$ | 7655 138.1 | 148.3 | 145,5 |
| Internet subscriptions (1.000) | 2114 | 2181 | 2331 |
| Per 100 inhabitants | 38.1 | 39.6 | 41,3 |
| xDSL subscriptions (1.000) | 1240 | 1200 | 1159 |
| Cable modem subscriptions (1.000) | 554 | 593 | 655 |
| Fibre subscriptions (1.000) | 149 | 245 | 368 |
| Mobile broadband subscriptions ${ }^{4}$ (1.000) | 3060 | 5085 | 6249 |
| Dedicated data subscriptions (1.000) | 740 | 980 | 1142 |
|  | mio. minutes (year) |  | mio. minutes (first half) |
| Domestic traffic, fixed network ${ }^{5}$ | 6381 | 4934 | 3746 |
| International traffic, fixed network ${ }^{5}$ | 434 | 439 | 368 |
| Domestic traffic, mobile network | 10249 | 11433 | 11989 |
| International trafic, mobile network | 513 | 727 | 703 |
|  | mio. (year) |  | half) - |
| SMS sent | 13205 | 11781 | 9053 |
| MMS sent | 75 | 119 | 199 |
|  | mio. MB in period (year) |  | st half) |
| Mobile data traffic | 10888 | 34034 | 91926 |
|  | - DKK mio | - | (rst half) -_ |
| Revenues | 40601 | 37255 | $\ldots$ |

${ }^{1} 2010$ and 2012 have been updated to 1 H figures compared to last year. ${ }^{2}$ Including fixed network IP telephony subscriptions ${ }^{3}$ Include GSM-, UMTS-, CDMA2000-subscriptions, mobile broadband and active GSM- og UMTS-prepaid cards. A prepaid card is active, if there within the last three months was incoming or outgoing traffic or reloads of the prepaid card. ${ }^{4}$ Cover the following subscriptions with a marketed/theoretical downstream capacity of a minimum of 256 kbit/s: Standard mobile subscriptions used for Internet data traffic, supplementary data subscriptions for mobile subscriptions and dedicated data subscriptions. ${ }^{5}$ Including traffic from fixed network IP telephony.

| Table 153 | Expenses for Research \& Development (R\&D) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013* |
|  | DKK mio. in 2012-prices |  |  |  |  |  |
| Total R\&D expenses | 52744 | 56502 | 55402 | 56599 | 57367 | 58195 |
| The public sector | 15900 | 17073 | 18262 | 18834 | 19750 | 20935 |
| The private sector | 36844 | 39430 | 37140 | 37765 | 37617 | 37260 |
| DKK mio. in current prices |  |  |  |  |  |  |
| Total R\&D expenses | 48787 | 52611 | 52826 | 54383 | 56495 | 58195 |
| The public sector | 14707 | 15897 | 17413 | 18097 | 19450 | 20935 |
| The private sector | 34080 | 36714 | 35413 | 36286 | 37045 | 37260 |
| - per cent |  |  |  |  |  |  |
| R\&D-expenses in per cent of GDP | 2.71 | 3.07 | 2.94 | 2.97 | 3.03 | 3.08 |
| The public sector | 0.82 | 0.93 | 0.97 | 0.99 | 1.04 | 1.11 |
| The private sector | 1.90 | 2.14 | 1.97 | 1.98 | 1.98 | 1.98 |


[^0]:    ${ }^{1}$ Higher preparatory examination. ${ }^{2}$ Higher commercial examination. ${ }^{3}$ Higher technical examination.
    ${ }^{4}$ International Standard Classification of Education

[^1]:    ${ }^{1}$ The newest number of students is equal to the old number of students plus the entrance of students minus those who either graduates or leaves without examination.

[^2]:    ${ }^{1}$ Includes only courses which are publicly financed and supervised.

[^3]:    ${ }^{1}$ All enterprises with at least 10 employees.

