

**Documentation of statistics for  
Upper-Secondary Education 2018**

## 1 Introduction

These statistics covers the activity on upper secondary education in Denmark. Upper-secondary education is defined from Statistics Denmark's education classification DISCED-15 as all education classified on level 20 or 35. Upper-secondary educations are typically 2-3 years in duration. Upper-secondary education statistics is in its current form comparable since 2005 and is part of the overall Student Register, which contains information on all students and students in ordinary education in Denmark.

## 2 Statistical presentation

These statistics contains figures about the enrollment and completion in upper-secondary education in Denmark. This includes the number of entrants, the number of completed and the number of active students. The statistics are divided by education and the students' age, sex, ancestry and national origin.

### 2.1 Data description

The statistics is an analysis of the population's enrollment in the upper-secondary education. The statistics are a part of the Student Register and is publicized yearly as a part of this. In StatBank Denmark, you can sort by students per 1 October, completed students and new students distributed by educational fields, age, ancestry, national origin and sex.

### 2.2 Classification system

The statistics is based on [DISCED-15](#), which is the Danish version of the international classification system ISCED.

The statistics provides information regarding the activity at:

- Category 20 in DISCED-15: Upper-secondary education, STX, 2-year STX, HF, HTX, HHX, and international upper secondary education, Pre-IB, IB, DFB and DIAP.
- Category 35 in DISCED-15: Qualifying educational programmes.

### 2.3 Sector coverage

Not relevant for these statistics.

### 2.4 Statistical concepts and definitions

Qualifying educational programmes: Shorter educations that are typically 1-1½ years in duration. They are aimed at people with vocational upper-secondary education or fugitives and gives qualification for entry to higher education.

Higher General Examination (STX): Higher General Examination is a 3 year programme and is a general upper-secondary education. The purpose is to grant qualification for entry to higher education. It is possible to choose from a variety of study programmes with subjects from humanities, science or social science.

Year: In the education statistics a year is defined as the period from 1 October the previous year to 30 September the mentioned year. As an example, 2017 is defined as 1 October 2016 to 30 September 2017.

**Danish-French Bacalauréte (DFB):** Danish-French Bacalauréte is a 3 year programme and is an international secondary-upper education. The teaching is mainly done in French and the education gives qualification for entry to higher education. The education takes place at Lycée Francais Prins Henrik in Copenhagen.

**Danish-German Examination (DIAP):** Danish-German Examination is a 3 year programme and is an international secondary upper-education. The teaching is mainly conducted in German and the education gives qualification for entry to higher education. The education takes place at Sankt Petri Schule in Copenhagen.

**Students per 1 October:** Persons enrolled on an education 1 October in the given year, for example 2017.

**Completed:** Persons completing their education in the period between October 1st and September 30th the following year.

**Ancestry:** Person of Danish origin is a person – regardless place of birth – where at least one parent is a Danish citizen and also born in Denmark. An immigrant is defined as a person born abroad whose parents are both (or one of them if there is no available information on the other parent) foreign citizens or were both born abroad. If there is no available information on either of the parents and the person was born abroad, the person is also defined as an immigrant. A descendant is defined as a person born in Denmark whose parents (or one of them if there is no available information on the other parent) are either immigrants or descendants with foreign citizenship. If there is no available information on either of the parents and the person in question is a foreign citizen, the person is also defined as a descendant.

**Higher Preparatory Examination (HF):** Higher Preparatory Examination is a 2 year programme and is a general upper-secondary education. The purpose is to grant qualification for entry to higher education at either a business academy or a university college. It is possible to choose an extended cluster of courses and get qualification for entry to an education at a university.

**Higher Commercial Examination (HHX):** Higher Commercial Examination is a 3 year programme and is a commercial upper-secondary education. The purpose is to grant qualification for entry to higher education. The education has more focus on businesses and economics than a Higher General Examination. Until 2005 it was possible to attend the HHX as a 1-year programme.

**Higher Technical Examination (HTX):** Higher Technical Examination is a 3 year programme and is a technical upper-secondary education. The purpose is to grant qualification for entry to higher education. The education has more focus on science and technics than a Higher General Examination.

**International Baccalaureate (IB):** International Baccalaureate is a 2 year programme and is an international secondary-upper education. The teaching is mainly conducted in English and the education gives qualification for entry to higher education.

**National Origin:** A person from Denmark is a person – regardless place of birth – where at least one parent is a Danish citizen and also born in Denmark. The Western countries are: All 28 EU countries and Andorra, Iceland, Liechtenstein, Monaco, Norway, San Marino, Switzerland, Vatican State, Canada, USA, Australia and New Zealand. The non-western countries are all other countries.

**Pre-International Baccalaureate (Pre-IB):** Pre-International Baccalaureate is a 1 year programme and is an international secondary-upper education. The teaching is mainly conducted in English and the education gives qualification for entry to International Baccalaureate.

**Student Courses (2 year STX):** Student Courses is a 2 year programme and is a general adult upper-secondary education. The purpose is to grant qualification for entry to higher education. The

education is a compressed version of the Higher General Examination.

Entrants: Persons beginning their education in the period between 1 October the year before to 30 September in the given year, for example 1 October 2016 to 30 September 2017

## **2.5 Statistical unit**

Persons.

## **2.6 Statistical population**

Persons who is enrolled on an upper-secondary education in Denmark which is publicly regulated. In detail, this means that The Ministry of Children and Education or another ministry has set the rules for the education through a law or an executive order. The population also contains persons enrolled on private upper-secondary education giving access to public grants.

## **2.7 Reference area**

Denmark.

## **2.8 Time coverage**

The current time series in StatBank Denmark covers the time period from 2005 and onwards.

## **2.9 Base period**

Not relevant for this statistics.

## **2.10 Unit of measure**

Number.

## **2.11 Reference period**

The newest data collection was for the period of 1 October 2017-30 September 2018.

## **2.12 Frequency of dissemination**

Yearly.

## **2.13 Legal acts and other agreements**

Law on Statistics Denmark § 6 and § 8 stk. 3.

Regulation (EC) No 452/2008 of the European Parliament and of the Council of 23 April 2008 concerning the production and development of statistics on education and lifelong learning.

### **2.14 Cost and burden**

The respondent burden is minimal. Data is collected by The Ministry of Children and Education for their data warehouse. Statistics Denmark receives the collected and troubleshot data from The Ministry of Children and Education.

### **2.15 Comment**

Further information can be found on the subject page for [Upper-secondary education](#) or by contacting Statistics Denmark directly.

## **3 Statistical processing**

The data for these statistics are received yearly in November/December from The Ministry of Children and Education. This means that the data received by Statistics Denmark have already been controlled. In addition, a thorough error search and validation of data are done by Statistics Denmark, where data is controlled for fluctuations across time and irregularities at the individual level. The Ministry of Children and Education are included in cases of substantial corrections.

### **3.1 Source data**

The source is the data warehouse of The Ministry of Children and Education.

### **3.2 Frequency of data collection**

The statistics are based on information collected once a year by The Ministry of Children and Education.

### **3.3 Data collection**

The majority of data is collected by The Ministry of Children and Education as system to-system reporting through administrative systems. Some institutions report manually through spreadsheets to The Ministry of Children and Education.

### **3.4 Data validation**

The data validation mainly consists of two types of error searching: macro error searching and micro error searching.

Macro error searching consists in searching after fluctuations on four parameters: Population (the number of students per 1 October), Entrants, Completions, and Discontinuations. The numbers are compared with the numbers from last year for every education on the institution. If bigger and relatively unlikely fluctuations are found, the institution have to either correct the numbers or tell Statistics Denmark that the numbers are correct and shows the factual development.

Micro error searching focuses on errors in the data received by Statistics Denmark about specific persons. Examples of micro errors could be an invalid education code or the student's start date being after the end date. A check for overlaps are also made, since there is not always agreement between the dates provided when the students change institutions. Statistics Denmark corrects the dates so the student does not seem to be enrolled on two institutions at the same time.

### **3.5 Data compilation**

Data from the institutions are aggregated to a total data set by The Ministry of Children and Education. Data are not processed much by Statistics Denmark, since the quality of the data is very good.

### **3.6 Adjustment**

No corrections of data are made except what has already been described under Datavalidering and Databehandling.

## **4 Relevance**

The statistics are relevant for public administrators, scientists and other analysts, journalists and citizens etc. as basis for prognoses, analyses and planning purposes in the educational field, but also for example in the labor market field and the integration field. The basic data for the statistics are used as background data for most of the personal statistics at Statistics Denmark, and it is the basis for the tables in StatBank Denmark about education.

### **4.1 User Needs**

The users are many and varied. The statistics are often used for external tasks ordered at Statistics Denmark by ministries, municipalities, research institutions, non-governmental organizations, private companies, individuals and the press. The basic data is used in more than 2000 research projects every year where scientists and researchers gain access to the data via Research Services at Statistics Denmark.

The Ministry of Education and the Ministry of Higher Education and Science receives the basic data, which is used for planning purposes, analyses and prognoses etc.

## **4.2 User Satisfaction**

The users are involved as much as possible. Some users can help by securing data from the educational institutions of a high quality is reported to Statistics Denmark on time and other users can give inspiration for new statistics and analyses.

Through user involvement, Statistics Denmark get inspiration to the development of methods and models that can contribute to the continued development and improvement of the statistics. Statistics Denmark also has a contact group for education statistics which meet once a year.

## **4.3 Data completeness rate**

The statistics fulfill the demands of the regulation as put forward by the EU.

## **5 Accuracy and reliability**

The administrative systems that is the basis for the statistics are used by the institutions for their own daily administration of the pupils and also for the payment of different economic grants. Data is collected by The Ministry of Children and Education to determine the economic grant for each institution. Correct registers are therefore necessary for the economy of the institutions and contributes to an expected high quality of the data source. Data has been troubleshot by The Ministry of Children and Education and the quality of the received data is quite high. Errors do occur but they are in most cases corrected the following year.

### **5.1 Overall accuracy**

The precision of the statistics is high, because data is taken directly from the administrative systems of the educational institutions by The Ministry of Children and Education. Uncertainty arises when the institutions register certain students or educations wrong. When this is discovered, the error is fixed before next year's publication of data. In more specific groups and educations the uncertainty might be higher.

### **5.2 Sampling error**

Not relevant for these statistics.

### **5.3 Non-sampling error**

Coverage errors can be persons enrolled on an upper secondary education that is not registered in the statistics. Missing records might happen in cases where there is an error in the registration of a student. When dates overlap for a student, the student usually is registered as finished on the first education on the date where he is registered to begin on the next education.

### **5.4 Quality management**

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

## **5.5 Quality assurance**

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

## **5.6 Quality assessment**

The strength of the statistics is that data are collected from the institutions' administrative registers, which the institutions use for the administration of their students. Errors in the administrative registers are however unavoidable.

## **5.7 Data revision - policy**

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

## **5.8 Data revision practice**

The institutions have the possibility of updating backwards in time when reporting data. When that happens, data from previous years are revised.

## **6 Timeliness and punctuality**

The statistics are published about 4 months after the reference time which is 1 October. The statistics are usually published without delay in accordance with the scheduled date.

### **6.1 Timeliness and time lag - final results**

The statistics are published approximately 4 months after the reference time which is 1 October.

### **6.2 Punctuality**

The statistics are usually published without delay in accordance with the scheduled date.

## **7 Comparability**

The current time series of these statistics goes back to 2005, but statistics on upper-secondary education have been made further back than this. It is possible to compare the figures internationally, as upper-secondary education is defined relatively similar in many countries.

### **7.1 Comparability - geographical**

The statistics form part of the basis of data in the OECD publication [Education at a Glance](#) with international comparisons of entrance to and graduations from the education system. When comparing across countries one should take into account that upper-secondary education can be understood differently.

### **7.2 Comparability over time**

The current time series of these statistics goes back to 2005. Archived tables in the StatBank The earliest figures on short-cycle higher education in the StatBank are from 2001. The archived tables are not directly comparable with the active tables. The archived tables are based on the old educational classification, which is no longer used.

Historical data The term "Higher Examination" which is an upper-secondary education was used for the first time in a statistical yearbook in 1914.

### **7.3 Coherence - cross domain**

Since the statistic is publicized together with the statistic about other educational levels in the Student Register, it is possible to compare with statistics for other educational levels.

### **7.4 Coherence - internal**

These statistics are internally coherent.

## **8 Accessibility and clarity**

Statistics are released yearly in a Danish press release, at the same time as the tables are updated in the StatBank. In the StatBank, these statistics can be found under the subject [Upper-secondary education](#). For further information, see the homepage of the [statistics](#).

### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

### **8.4 News release**

These statistics are published yearly in a Danish press release.

## 8.5 Publications

Publications only in Danish.

## 8.6 On-line database

The statistics are published in the StatBank under [Upper-secondary education](#) in the table:

- [UDDAKT30](#): Educational activity in upper secondary school

## 8.7 Micro-data access

The different versions of The Student Register are stored in Statistics Denmark's Database PSD. Researchers and other analysts from authorized research institutions, can be granted access to the underlying micro-data by contacting [Research Services](#).

## 8.8 Other

The Student Register forms the basis of data in the publication [Education at a Glance](#) with international comparisons of entrance to and graduations from the education system.

## 8.9 Confidentiality - policy

[Data Confidentiality Policy](#) for Statistics Denmark.

## 8.10 Confidentiality - data treatment

In the tables in StatBank Denmark, the numbers of variables are limited, which eliminates the possibility of identifying individual persons.

## 8.11 Documentation on methodology

Documentation on methodology for these statistics is only available in Danish.

## 8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## 9 Contact

The administrative placement of this statistic is in the Division of Population and Education. The person responsible is Jonas Holst-Jensen, tel. +45 3917 3125, e-mail: [hoj@dst.dk](mailto:hoj@dst.dk)

### 9.1 Contact organisation

Statistics Denmark

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Population and Education, Social Statistics

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