

Documentation of statistics for The Student Registre 2018



# **1** Introduction

The Students Register, which was established in the early 1970's, is a longitudinal register that allow you to follow the educational careers of students in the mainline education system. The purpose of "The Student Register" is to analyze entrance to, enrolment in and graduation from the mainline education system as well as transmissions of student within the system.

# **2 Statistical presentation**

The Student Register is a longitudinal register that allows you to follow the educational career of each students throughout all the educational programs constituting the students educational career. The register covers educational careers starting from preschool to PhD. All public recognized educational programs are included. Data about PhD are delayed by one year compared to the other data in the register. Adult or continuing education as well as education taken outside Denmark is not included in the register.



## 2.1 Data description

The Students Register is a longitudinal register that allows you to follow the educational career of each students throughout all the educational programs constituting the students educational career. The register is updated annually by reported data from the educational institutions. The reports concern continuing students from the previous year as well as entrance and exit during the year under review. Regarding exit, information on achieved qualification (= graduation) is retained. The register covers educational careers starting from preschool to PhD. at university level. Basic school includes only grade 8-10. up to the school year 2005/06. From 2007 preschool through 7th grade is included. All public recognized educational programs are included. 'Recognized programs' means that the Ministry of Education or another ministry has regulated and approved the programs. Data about PhD are delayed by one year compared to the other data in the register.

Please note, that adult or continuing education as well as education taken outside Denmark is not included in the register.

- The variables in the register are;
- Person number (PERSON\_ID)
- Education code (UDD)
- Education part (UDEL)
- Education form (UFORM)
- Starting date (ELEV\_VFRA)
- Ending date (ELEV\_VTIL)
- Qualification code (AUDD)
- Institution number (INSTNR)

For further description of the individual variables see documentation in TIMES.

There are 2 versions of the student register:

• Elev3: Each grade in basis school and upper secondary school are on separate record. Vocational education is divided in the basis part and the main part. In addition, it is possible to see the institution shifts and breaks during an education. This version of the student register is the most detailed.

-Elev3 hole closed. In this version of the register, all gaps in the education, as a result of institutional shifts and breaks during a training removed if the hole is less than 13 months and each record are merged into one record.

## 2.2 Classification system

In connection with publications from the student register Statistic Denmark's classification system "DISCED" is used. A description of it can be found at: <u>DISCED</u>

## 2.3 Sector coverage

Educational institutions providing publicly recognized education or education which give access to public grants.



#### 2.4 Statistical concepts and definitions

Enrolled: The student register is used to measure entrance to, enrolled and graduations from the ordinary education system. In connection with dissemination of statistical data in Statistic Denmark's Statbank the following definitions are used: Enrolled is defined as: people who are enrolled 30. September yyyy.

Graduate: The student register is used to measure entrance to, enrolled and graduations from the ordinary education system. In connection with dissemination of statistical data in Statistic Denmark's Statbank the following definitions are used: Graduate is defined as: people who completed an education in the period 1. October yyyy-1 - 30. September yyyy.

Entrance: The student register is used to measure entrance to, enrolled and graduations from the ordinary education system. In connection with dissemination of statistical data in Statistic Denmark's Statbank the following definitions are used: Entrance is defined as: people who begin their education in the period 1. October yyyy-1 - 30. September yyyy.

Counting year: The counting is done each October and the figures for a given counting year cover the period from 1 October from the previous year to 30 September that year

#### 2.5 Statistical unit

The statistical unit is people.

#### 2.6 Statistical population

The population consist of people who have been enrolled in an ordinary education in Denmark, that are public recognized. Since 2007 private education that give access to public grants is also included. The register covers education from preschool (up to 2006 only from 8th grade) up to PhD level. When the students register is updated, the information concerning the PhD are one year behind.

#### 2.7 Reference area

The population consists of people who have been enrolled in an ordinary education in Denmark.

#### 2.8 Time coverage

The Students Register, which was established in the early 1970s, is a longitudinal register and is updated once a year.

## 2.9 Base period

Not relevant for this register.

#### 2.10 Unit of measure

The unit of measure is the number of people.



## 2.11 Reference period

The Student Register is a longitudinal register covering the period from early 1970s up to 30 September in the reference year. The period is prolonged annually by one year.

## 2.12 Frequency of dissemination

Statistics are published yearly.

## 2.13 Legal acts and other agreements

The Act on Statistics Denmark §6 and §8 stk. 3.

#### 2.14 Cost and burden

The respondent burden is minimal. Data are collected from local schoolbased administrative registers although a few institutions report by questionnaires.

#### 2.15 Comment

Further information can be found on Statistics Denmark's homepage: Fulltime education.

# **3 Statistical processing**

The Student Register is based on annual reports from the Danish educational institutions. The majority of data is collected by system to-system reporting. However, there are a few educational institutions which report through web-based questionnaires. In cooperation with system suppliers. Statistics Denmark has established requirements for reporting formats, validation and error searches. In addition, there is an extensive validation of data at Statistics Denmark.

## 3.1 Source data

The Student Register is based on annual reports from the Danish educational institutions.

## 3.2 Frequency of data collection

The register is based on information, that is gathered once a year.

#### 3.3 Data collection

The majority of data is collected by system to-system reporting. However, there are a few educational institutions which report through web-based questionnaires.



## 3.4 Data validation

In cooperation with system suppliers Statistics Denmark has established requirements for reporting formats, validation and error searches. Search for macro errors carried out at the institutions before the data is submitted, consists of a count on some predefined categories at individual institutions. The counts are compared with the figures for the last year. If there are larger and relatively improbable fluctuations, the educational institution must follow up on it. When data is received at Statistics Denmark, they are subjected to a new error check. One of the main types of error checking is related to macro error, which is to search for the volatility that some of the institutions have also been asked to consider.

Micro-data editing is carried out in line with the more general checks, because attention is here to a greater extent focused on the discrepancies in the records. This may be disabled education codes for individual students at different institutions and education or a related check: e.g. whether the starting date is after the time of departure. A duplication check is conducted, since there is not always consistency between the dates when students change institution. Statistics Denmark dishes dates, so that the student can not be enrolled in several educations simultaneously. It happens that the institutions do not update all their students. In case of a larger number of students the institutions are asked to make a new report of data.

When data is loaded in the student register there is an error check on record level for invalids values of all variables. Furthermore we conducts checks with regard to inconsistencies between variables, such as age at commencement time in relation to education. Time series on entrance, enrollment and completion on education level are controlled.

#### 3.5 Data compilation

When data are entered into The Student Register from different areas, there are in some cases overlaps between programs. These overlaps are removed from The Student Register. Some courses are reported in several parts, for example, because the student changes institution during his/her education. These education components are assembled into a single course in The Student Register.

On the basis of The Student Register, a special version of The Student Register is formed, where the education parts belonging to the same education are collected into a record if the distance between them is less or equal to 13 months. Thus, in this version of The Student Register, it is not possible to see breaks in the education courses of less than 13 months or institutional shift during the education process.

## 3.6 Adjustment

There are no corrections of data beyond what has already been described under data validation and data processing.

## 4 Relevance

The register is obvious to illuminate the entrance to and departure from the ordinary education system as well as student flows in it and forms the basis for many of the education tables in Statistic Denmark's databank.



## 4.1 User Needs

Users are many and varied. The register forms the basis for many of the education tables in Statistic Denmark database and is often used in connection with external service tasks ordered by the government, research institutions, NGOs, private companies, individuals, and not least to inquiries from the press.

# 4.2 User Satisfaction

In working with the education statistics the users are involved as much as possible. Some users can be instrumental in ensuring that the data from the schools have a high quality. Other users can provide inspiration for new statistics and analysis. Finally, we try to get inspiration for the development of methods and models that can contribute to the continued development and improvement of statistics through users.

## 4.3 Data completeness rate

Not relevant for this register.

# 5 Accuracy and reliability

The reliability of the educational information is considered to be high. The information in the student register is obtained from the institutions' administrative register and goes through a comprehensive error check in connection with the annual data collections.

## 5.1 Overall accuracy

The reliability of the educational information is considered to be high. The information in The Student Register is obtained from the institutions' administrative register and goes through a comprehensive error check in connection with the annual data collections. The update of The Student Register further requires that the active students are rediscovered each year. Thus, there must be continuity in reporting over the years. The uncertainty arising from the fact, that the institutions through the annual reports have the opportunity to correct and report data backwards in time are notoriously approximately 0-3pct. The uncertainty is particularly true over the last year.

## 5.2 Sampling error

Not relevant for this register.

## 5.3 Non-sampling error

Not relevant for this register.



## 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 reliability of the educational information is judged to be good. The information in The Student Register is obtained from the institutions' administrative register and goes through a comprehensive error check in connection with the annual data collections. The update of The Student Registry further requires that the active students are rediscovered each year. Thus, there must be continuity in reporting over the years. The uncertainty arising from the fact, that the institutions through the annual reports have the opportunity to correct and report data backwards in time are notoriously approximately 0-3pct. On more specific groupings and individual training security will be higher. The uncertainty is particularly true over the last year.

There is a memo on Statistic Denmark's homepage describing important aspects of this year's data collection to The Student Register <u>Paper on Education</u>

## 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. 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 figures from the latest year could be considered provisional because of the possibility of updating backwards in time when the institution is reporting. When updating Statbank Denmark with the present year, the previous year is also updated.

# 6 Timeliness and punctuality

The statistics are published about 4 months after the end of the reference time. 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 end of the reference time. The uncertainty that arising because the institutions through the annual reports have the opportunity to correct back in time is notoriously around 0-3 per cent within a training division. On more specific groupings and individual education uncertainty will be higher. The uncertainty is particularly true in the past year.

## 6.2 Punctuality

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

# 7 Comparability

The information contained in the student register starts in 1973 and comparability over time is good. Basic school includes only grade 8-10. up to the school year 2005/06. From 2007 preschool through 7th grade is included.

## 7.1 Comparability - geographical

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.

## 7.2 Comparability over time

The possibility for comparisons over time is good. When an education changes level, it is allocated with a new UDD and AUDD code but both the old and the new codes will be classified on the new level. You will not have to search the policeman different places in classification although the education for police officer has evolved and changed level. Police officers with the shorter education are lifted up - a police officer is a police officer. When an education changes level in the classification system, e.g. from a short cycle higher education to a medium cycle higher education the number of students in short cycle higher education will decrease and the number of students in medium cycle higher education will increase. This has an impact on the comparison with previously published figures.

The student register was extended to include data on preschool through 7th grade from school year 2006-2007.

## 7.3 Coherence - cross domain

There are no comparable statistics in Denmark.

## 7.4 Coherence - internal

All data sources are considered to have the same high quality.



# 8 Accessibility and clarity

Statistics are published once a year in "News from Statistics Denmark". At the same time data are released in Statbank Denmark and on: <u>Education office homepage</u>.

Information also appears in the annual publications: Statistical 10-Year Review.

## 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 Calender can be accessed on our English website: <u>Release Calender</u>.

#### 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

New releases of "News from Statistics Denmark" can be found on the: Homepage.

#### 8.5 Publications

• Statistical 10-Year Review: <u>Statistical 10-Year Review</u>.

#### 8.6 On-line database

Data are released in Statbank Denmark under the subject Education and Knowledge, fulltime educations: <u>Statbank Denmark</u>.

#### 8.7 Micro-data access

The different versions of The Student Register are stored in Statistic Denmark's Database PSD.

#### 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

In connection with publication from the register Statistics Denmark's data privacy policy is followed, see: <u>Data privacy policy</u>.



#### 8.10 Confidentiality - data treatment

For reasons of secrecy it is only possible to combine a limited number for variables in connection with publication from the register in the Statbank.

#### 8.11 Documentation on methodology

For further information please contact:

Statistic Denmark, Population & Education, Susanne Mainz Sørensen, tel. +45 3917 3394, e-mail: sms@dst.dk

#### 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 Susanne Mainz Sørensen, tel. +45 3917 3394, e-mail: sms@dst.dk

#### 9.1 Contact organisation

Statistics Denmark

## 9.2 Contact organisation unit

Population and Education, Social Statistics

#### 9.3 Contact name

Susanne Mainz Sørensen

#### 9.4 Contact person function

Responsible for the statistics

## 9.5 Contact mail address

Sejrøgade 11, 2100 Copenhagen

#### 9.6 Contact email address

sms@dst.dk

# 9.7 Contact phone number

+45 3917 3394

# 9.8 Contact fax number

+45 39 17 39 99