

Documentation of statistics for Primary and lower secondary education 2018



1 Introduction

The purpose of statistics is to present the number of pupils and the scale of pupils per class in the Danish schools. The statistics analyze the entrance to, enrolment in and graduation from basic school, which in Denmark is the primary and lower secondary school. The statistics is for the presents form comparable from 2007, and from 2009 for pupils per class.

2 Statistical presentation

The statistics is a yearly analysis of the populations enrollment and completion in the basic school system from grade 0 to 10/11th grade. The statistics also covers the participation in special needs classes and number of pupils per class. The statistics is divided into grades and types of schools, age, gender and heritage as well as geography. The school statistics is part of The Student Register, which 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.

2.1 Data description

The statistics is an analysis of the populations enrollment in the basic school system, which consists of grade 0 up to grade 11. The school statistics is part of The Students Register, which 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 statistics 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 is updated annually by reported data from the Danish schools. The reported data concern entrance and exit the previous school year as well as the ongoing school year. Information about grade completion or early drop-out for each pupil is retained. From 9th grade the school year ends with an exam. Most pupils' entrance is in August, but entrance later can be seen due to school fusions and change of school. In basic school completion can only be accomplished in June. The only exceptions are delayed exams due to illness or 10th grade, which can be completed after half a year at vocational schools. Exits prior are classified as early drop-out. Please note that adult or continuing education as well as education as well as education taken outside Denmark is not included in the register. Please note, that adult or continuing education as well as education taken outside Denmark is not included in the register.

Besides the information needed for The Student Register information collected about class type, class name, level, if Danish is not the native language or participation in an integration class for migrants. During spring semester data is collected about special need education.

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



2.2 Classification system

The statisttics is based on <u>DISCED</u>, which is the Danish version of the international classification system ISCED.

Basis schools providing publicly recognized education. For primary and lower secondary education schools data is collected from public and private schools, youth schools and youth boarding schools, special support schools, day treatment centers and treatment homes and other schools

The statistics is divided into grades, age, gender and heritage. The statistics is presented geographical after municipalities and regions.<u>regioner og kommuner</u>.

2.3 Sector coverage

The education sector

2.4 Statistical concepts and definitions

Bestand: Elevregistret benyttes til at opgøre tilgang til, bestand og afgang fra det ordinære uddannelsessystem. I forbindelse med offentliggørelser i statistikbanken benyttes følgende definition: Bestand er defineret som personer der er igang på en uddannelse i perioden 30. september åååå.

Fuldført: Elevregistret benyttes til at opgøre tilgang til, bestand og afgang fra det ordinære uddannelsessystem. I forbindelse med offentliggørelser i statistikbanken benyttes følgende definition: Fuldført er defineret som personer der fuldføre en uddannelse i perioden 1. oktober åååå-1 - 30. september åååå.

Tilgang: Elevregistret benyttes til at opgøre tilgang til, bestand og afgang fra det ordinære uddannelsessystem. I forbindelse med offentliggørelser i statistikbanken benyttes følgende definition: Tilgang er defineret som personer der påbegynder en uddannelse i perioden 1. oktober åååå-1 - 30. september åååå.

2.5 Statistical unit

The statistical unit is people and the number of pupils per class.

2.6 Statistical population

The population consists of people who have been enrolled in a basic school in Denmark, publicly recognized by the Ministry of Education. Since 2007 all grades from grade 0. to 11th Grade are covered in the statistics. Until 2006 is was only from 8th grade and up which was included in the statistics.

2.7 Reference area

Denmark with the exception of Greenland and the Faroe Islands



2.8 Time coverage

The statistics is presented in its present form since 2007, and for the number of pupils per class since 2009.

2.9 Base period

Not relevant for this register.

2.10 Unit of measure

The unit of measure is the number of people and number of pupils per class.

2.11 Reference period

The 30th September latest 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. EU-regulation number 452/2008.

2.14 Cost and burden

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

2.15 Comment

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

3 Statistical processing

The basic school statistics is based on annual reports from the schools administrative systems, which is collected yearly for The Student Register. The majority of data is collected by system tosystem reporting. However, there are a few educational institutions which report through webbased questionnaires. There is an extensive validation of data at Statistics Denmark.

Further information is collected about special needs education. Data from public schools is collected via the administrative systems, where as the private school is collected via the Ministry of Education.



3.1 Source data

The source for the statistics is collected via the schools administrative systems. Statistics Denmark has in collaboration with the suppliers of the administrative systems established requirements for reporting formats, validation and error searches. A thorough validation of data is carried out in Statistics Denmark before the basic school data is assembled with rest of the education data and The Student Register is produced.

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. When data is received at Statistics Denmark, they are subjected to several error checks. One of the main types of error checking is related to macro error, which is to search for the volatility. It happens that the schools 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 before the error search is continued.

Search for macro errors is carried out. The counts are compared with the figures for the last year. If there are larger and relatively improbable fluctuations, the school must follow up on it. 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 schools and education or a related check: e.g. whether the starting date is after the time of departure. 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.

A duplication check is conducted, since there is not always consistency between the dates when pupils change schools. Statistics Denmark changes the dates, as the pupil can not be enrolled in several educations simultaneously. The basic school statistics is checked for unlikely change of level e.g. if a pupil go from grade 0 to grade 10. Likewise an error search for the grades for different types of schools. E.g. normally 6th grade is the lowest grade in the youth schools, unless it is classes for migrants. Migrants and especially refugees are often placed in grades other than expected, when compared to the age. The education level is not changed by Statistics Denmark for these kind of pupils.



3.5 Data compilation

When data are entered into the statistics from different schools, there are in some cases overlaps due to a change of school during the school year. These overlaps are removed from data by changing the dates. Unlikely changes of level may be corrected, as well as unlikely grades at e.g. municipality youth schools. Special schools for children and schools for maladjusted children can find it difficult to report the educational level for the pupils, as it can vary from subject to subject. For this reason the educational level and UDD code is stated as the normal grade for the pupils age.

3.6 Adjustment

No further corrections is carried out besides those described in 3.4 and 3.5.

4 Relevance

The statistics is relevant for public administrators, scientists and other analysts, journalists and citizens etc as basis for prognoses, analyses and planning purposes. The basic data for the statistics are used as background data for most of the personal statistics at Statistic Denmark, and it is the basis for the statbank tables about education.

The statistics 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 statistics 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, municipalities, research institutions, NGOs, private companies, individuals, and not least to inquiries from the press.

The basis data is used to more than 2000 research projects every year, where scientist and researchers gain access to the data via Research Services at Statistic 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. More than

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 analyses. 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

The statistic fulfill the demands by EU regulation number 452/2008 regarding the enrollment of students, graduates, exams, foreign language and class size. The Department of economical statistics is responsible for the statistics regarding cost. The statistic regarding staff is collected by the Ministry of Education and is not published presently.

5 Accuracy and reliability

The reliability of the educational information is considered to be high. The information in the statistics 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 statistics is obtained from the schools' 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. It rarely happens that the basic schools need to correct their data. The uncertainty is particularly true over the last year.

The census of children in basic schools covers all pupils in all schools approved by the Ministry of Education, and the statistics covers practically all children in Denmark. Few records is deleted, if the civil registration number can not be established. The few number of children, who are not enrolled in a school, as they receive home education are not part of the basic school statistics. Fore this reason the number of children receiving education in Denmark is slightly underestimated.

5.2 Sampling error

Not relevant for this register.

5.3 Non-sampling error

The basic school statistics covers almost every child in Denmark. The lack of complete coverage can be caused by an error in a schools data report, but also because children who for varies reasons are not enrolled in a school is not covered in the statistics. However children who is does not have a civil registration number, but is attending classes in a Danish school is covered by the statistics. Children recently migrated to Denmark is in that category - e.g. children seeking asylum or children of expats. Moreover children living in another country but goes to school in Denmark (eg. the Danish minority in Germany or children of diplomats) are also covered by the statistics. By comparison with the Civil registry the number of children in this statistic is higher.

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 3 to 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 regarding the number of pupils in the basic schools is published at the Student Register approximately 4 months after the end of the reference time. The statistics on special needs education are published approximately 3 months after the end of the reference time. The statistics covers the ongoing school year.

6.2 Punctuality

The statistics is normally published without delay.



7 Comparability

Statistics Denmark has produced statistics about number of pupils in the basic school since the 19th century. In its present form the statistics is comparable since 2007. Before 2007 grade 0 to 6 was not compiled. From 2007 all grades from grade 0 to 10/11 are compiled. The number of pupils per class have been calculated since 2009. Information regarding special needs education has been gathered since 2011.

The statistics is produced according to the common European guidelines and is comparable to statistics from other countries published by OECD.

7.1 Comparability - geographical

The statistics forms the basis of data in the publication "Education at a Glance" with international comparisons of entrance to and graduations from the education system.

The statistics is produced according to the common European guidelines and is comparable to statistics from other countries published by Eurostat.

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 in the Education classification. For basic school, It is only the preschool grade, which could be taken voluntarily, that has been changed into a mandatory grade 0 in 2011.

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

In 2011 data regarding special need education started being collected. STUK under the Ministry of Education collects the data from private schools and boarding schools. They changed the practice in 2017 as the schools no longer has to report the number of hours the pupils receive special needs education.

The method to produce The Basic School Register was changed in 2017 in order to make it more comparable to the Student register. It is now based on the Student Register data collection. Before is was produced based on the data collection for the special needs education.

7.3 Coherence - cross domain

The method to produce The Basic School Register was changed in 2017. It is now based on the Student Register. Before is was produced based on the data collection for the special needs education.

There are no other comparable statistics in Denmark.

7.4 Coherence - internal

All data sources use the same format and same units, which makes the data consistent.



8 Accessibility and clarity

These statistics are published in the StatBank under <u>Primary and lower secondary education</u> and i a Danish press release. For further information go to the <u>subject page</u> for these 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 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

These statistics are published in a Danish press release.

8.5 Publications

Publications only in Danish.

8.6 On-line database

These statistics are published in the StatBank under Primary and lower secondary education.

8.7 Micro-data access

Researchers and other analysts from authorized research institutions, can be granted access to the underlying microdata by contacting <u>Research Services</u>.

8.8 Other

The Student Register is the basis of the Danish contribution to <u>Education at a Glance</u> with international comparisons of entrance to and graduations from the education system.

8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is applied.



8.10 Confidentiality - data treatment

In connection with publication Statistics Denmark's data privacy policy is followed. Datafortrolighedspolitik i Danmarks Statistik.

In statbank tabel UDDAKT20 the statistics is divided into public and private schools, boarding schools, youth schools, special needs schools and schools for maladjusted children, as well as other schools. Other schools covers 6 different types of scools, which consists of max. 20 institutions with a small amount of pupils. The schools are presented as one group in order to ensure discretion for both schools and pupils.

8.11 Documentation on methodology

For further information on methods, registers, nomenclature etc: Manualen og Fuldtidsuddannelser.

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 these statistics are in the division Education and Population. The person responsible is Lene Riberholdt, tlf. +45 39 17 31 85, e-mail: lri@dst.dk

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