

**Documentation of statistics for  
Non-attendance, vocational education 2016**

## 1 Introduction

The purpose of the statistics about non-attendance in vocational education is to look at the students who enrolls at an vocational education, but does not begin.

The statistics were compiled for the first time in 2017. The statistics cover the period from 2011 to 2016.

## 2 Statistical presentation

The statistics of non-attendance at vocational education contains the students who in the administrative systems of the vocational education schools have been registered with a code that show that the student did not begin the education. The statistics are initially published through an article from Statistics Denmark.

The statistics only contains students on the basic course and on the so-called "school road" (students who begin their education at school).

The time registration suffers from certain deficiencies. Statistics Denmark has therefore decided not to measure the statistics for single years, but only for the total period from 2011 to 2016.

Changes were made to the registration practice in 2015. Statistics Denmark estimates that the change in registration practice does not have any significant influence on the number of never begun students.

### 2.1 Data description

The statistics of non-attendance at vocational education contains the students who in the administrative systems of the vocational education schools have been registered with a code that show that the student did not begin the education. Every time a student has been registered with one of these codes, the student becomes a record in the statistics. In the related article, the share of the total entrants at the basic courses on the so-called "skolevej" (students, who begin their education at school, not in practice at a firm) which these students constitutes is used. It is also shown what the characteristics of these students are compared to other students at the vocational educations.

### 2.2 Classification system

The statistics only contains students at the basic courses of vocational educations. These are defined from Statistics Denmark's education classification DISCED-15: [DISCED-15](#). The main levels in DISCED-15 are defined from how the educations are regulated by law. For these statistics, students on main level 29 (vocational basic courses) and 30 (vocational educations) are included. Main level 30 is included because basic course 2, which was created with the vocational education reform of 2015, is placed on this level.

### 2.3 Sector coverage

Educational institutions providing publicly recognized vocational education or vocational education which give access to the Danish State Educational Grant and Loan Scheme (SU).

## **2.4 Statistical concepts and definitions**

Never begun: A student is considered never begun if the student has been registered with either code 1 (never begun) or code 31 (application withdrawn) in the institutions' administrative system EASY-A. These codes have been defined by the National Agency for It and Learning (STIL) and is used by the schools when a student is deregistered before the education begins.

## **2.5 Statistical unit**

The statistics are observed for educational institutions, educations and persons. The combination of these three units produces an education enrolment, which is the measuring unit.

## **2.6 Statistical population**

The statistics show the number of students who enrol on a basic course on an ordinary full-time vocational education, but end up not starting on the education.

## **2.7 Reference area**

Denmark (not including the Faroe Islands and Greenland).

## **2.8 Time coverage**

In the published statistics, data from 2011 to 2016 is used.

## **2.9 Base period**

Not relevant for these statistics.

## **2.10 Unit of measure**

The measuring unit is education enrolments. An education activity is defined as a person registered as enrolled on a certain education at a certain institution.

## **2.11 Reference period**

In the published statistics, data from 2011 to 2016 is used.

## **2.12 Frequency of dissemination**

The statistics are for now a one-time publication.

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

Law on Statistics Denmark § 6 and § 8 stk. 3. There is no EU regulation.

## **2.14 Cost and burden**

The statistics gives no extra respondent burden, since the data is sent in together with the ordinary reporting of students on vocational educations. See more in the documentation for the [Student Register](#).

## **2.15 Comment**

Further information can be found at the [Subject page](#) for vocational education, or by contacting Statistics Denmark directly.

## **3 Statistical processing**

Data for these statistics are collected from the administrative system of the vocational education institutions. The collected data is validated by contacting vocational education institutions. Data has also been compared with the number of entrants at an educational and institutional level to find eventual irregularities. Thereafter, data is processed to neutralize certain irregularities which has been found in the data validation process.

### **3.1 Source data**

The sources for the statistics are data from the educational institutions' administrative systems.

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

Data are collected yearly.

### **3.3 Data collection**

Data is collected by system to-system reporting through the administrative system EASY-A.

### **3.4 Data validation**

Statistics Denmark has contacted the largest vocational education institutions and institutions with large fluctuations in the number of never begun students across time to ask about their registration practice. Specifically, Statistics Denmark has asked the schools about:

1) How their registration practice is with regards to never begun students, 2) Whether the registration of never begun students have been done systematically and consistently, 3) Whether the registration of never begun students have changed over time, 4) Whether they can recognize the specific numbers that Statistics Denmark has registered on their institution,

From these answers, Statistics Denmark has made a decision as to how data can be conceived and what deficiencies the data has.

The numbers of never begun students have also been compared with the number of entrants at an educational and institutional level. This has been done to control whether some educations or institutions does not have the expected number of never begun students compared to the total number of students.

### 3.5 Data compilation

Data is taken from the reports that the vocational education institutions send to Statistics Denmark through the administrative system EASY-A. Firstly, all records with the relevant codes (1 and 31) is used. By contacting the largest institutions and institutions with large fluctuations in the number of never begun students, it can be determined that the registration practice has not been rigorous from school to school. Code 31 was added to EASY-A in connection with the vocational education reform of 2015, but the schools have informed Statistics Denmark that they use this code in different ways. Some schools only use one of the codes, while others use different codes depending on whether the student deregisters or does not show up. By using both codes to define never begun, it is more certain that all relevant students are part of the statistics. Because of the missing rigorous registration practice it is not possible at this time to say something about students who does not show up compared to students who withdraw their application.

From each record Statistics Denmark produces the variables "uddannelsesdel" (part of the education) and "uddannelsesform" (form of the education) which shows what part of the education the student had enrolled on and in what way the education was to be taken.

Statistics Denmark defines a date for the defection. Statistics Denmark has found out that the registration of the time of the defections at some institutions has been flawed. In some cases, the defections have been registered after it really happened. Statistics Denmark has therefore decided to use the earliest registered date as the date of the defection even though this might not be the registered date of defection. However, there is still no certainty that this produces the correct date. The time registration is therefore only used to define the students who did not begin from 2011 to 2016 and not as its own variable.

Duplicates are deleted if the variables institution, education and date are the same for a person.

In the published statistics, only students enrolled on a basic course (basic course 1 and 2 after the vocational education reform of 2015) and the so-called "skolevej" (students, who begin their education at school, not in practice at a firm) are included. Students who begin in practice at a firm is not included due to the fact that the uncertainty about their registration is higher, given that they do not begin their education at the registering school.

### 3.6 Adjustment

Not relevant for these statistics.

## 4 Relevance

Statistics Denmark expects a general public interest for the statistics and that the statistics will be interesting to a wide range of users. The statistics can be used to document the proportion of enrolled students at the vocational educations which drops out before the start of the education. Since it is the first time the statistics are published, the satisfaction with the statistics is unknown.

### 4.1 User Needs

Statistics Denmark expects a general public interest in the statistics, and that the statistics will be used by the same users who are normally interested in education statistics. Users could for instance be nongovernmental organizations, journalists, interested citizens, scientists, educational institutions and ministries. The statistics can be used for research and policy making.

## **4.2 User Satisfaction**

Since it is the first time that the statistics are published, the satisfaction of the users is unknown. Statistics Denmark is in close contact with central users and will get feedback from them.

## **4.3 Data completeness rate**

Not relevant for these statistics.

## **5 Accuracy and reliability**

There are known sources of uncertainty, especially imperfect registration practices with regards to registered dates. Therefore, Statistics Denmark only publishes the statistics with overall numbers for the entire period 2011-2016. Statistics Denmark does find that the registration of never begun students is reasonably correct and the numbers over a larger period of time are therefore deemed to be pretty accurate. The reliability is therefore judged to be good.

### **5.1 Overall accuracy**

The uncertainty of the statistics is mainly due to changing and different registration practices at the educational institutions. After Statistics Denmark's contact with selected institutions, all enrolments with the codes which the schools have mentioned that they use for never begun students have been included in the statistics. It can still not be ruled out that some schools might have had other registration practices which Statistics Denmark is not familiar with, but Statistics Denmark finds it unlikely that this will have any large influence on the overall precision of the statistics.

There is uncertainty about the time registration of the non-attending students. Some schools have registered students several years after they should have done it. Statistics Denmark therefore finds that the quality of the data with regards to registered dates is not good enough to look at the development over time, and the statistics are therefore only published with overall numbers for the total period 2011-2016.

Until 2015, certain types of education had a larger amount of never begun students than one would expect looking at the overall size of the education. This is due to restricted admission, where an apprenticeship or a quota place is required. This means that many enlisted students are not allowed to begin the education. After the vocational education reform of 2015 the registration practice was changed, so these students are no longer inscribed in the administrative systems before being definitely enrolled. This also produces a break in the data series. Before 2015, restricted admission was only in place on very few types of vocational education, and the total amount of never begun students who were not allowed to begin due to restricted admission is therefore estimated not to be very large.

The overall precision over a longer period of time is estimated as good, but a specific assessment of the total uncertainty is not possible.

### **5.2 Sampling error**

The sampling uncertainty is zero, since it is a total counting.

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

There is some uncertainty regarding the registration of never begun students. Even though Statistics Denmark have taken the different registration practices of the schools into account, it cannot be ruled out that some schools might have had other registration practices.

There is also uncertainty regarding the registered dates for the non-attending students. Statistics Denmark does therefore not publish the statistics distributed per year. Finally, there might be small uncertainties regarding the variable "uddannelsesdel" (part of the education) which Statistics Denmark creates from information in the reported data.

### **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 are that they are collected from administrative systems at the educational institutions. The administrative systems have other uses than the purely statistical. One of these are payment of grants to the institutions, which means that the institutions have an economic incentive to ensure that the information is correct. The registers are also used in the daily administration at the institutions, which demands up-to-date registers.

Another strength is that data are collected through the ordinary reporting of education data to Statistics Denmark. Every year in October, Statistics Denmark collects data about students on all educational institutions in Denmark. With these data, Statistics Denmark has also received information about never begun students. This means that all vocational education institutions are a part of the statistics. Therefore, the statistics come as close to the desired population as possible. In addition, the ordinary data collection is a data collection that Statistics Denmark has a lot of experience with.

The weakness of the statistics are the mentioned possible sources of uncertainty with regards to the registration. These mean that the statistics cannot be published as detailed as desired.

It is also a weakness that the statistics has a break in the data series. The break is a result of the vocational education reform of 2015. The basic course was split into two. Some students begin on basic course 1, while others begin directly on basic course 2. This means that students who complete basic course 1 and thereafter enrolls on basic course 2 without beginning it, is also registered in the statistics. In addition, students who cannot begin because of the restricted intake on certain educations were earlier registered as non-attending, but this was changed with the reform. Statistics Denmark estimates that the change in registration practice does not have any significant influence on the number of never begun students.

Finally, it weakens the statistics that this is the first publication of the statistics, which means that there are no prior numbers to compare with.

## **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**

Because it is the first time the statistics are published, there is no normal practice for revisions. If errors in the statistic is found, Statistics Denmark will of course revise the statistics.

## **6 Timeliness and punctuality**

The statistics are published nine months after the end of reference period. The statistics was first planned to be published in November 2016 (without data for 2016), but had to be delayed.

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

The latest data in the statistics has been collected in October 2016. The statistics have not been published before August 2017 because of the need to develop a production machinery for the statistics, since it is the first time it is published and also due to the validation of the data.

## **6.2 Punctuality**

The statistics was first planned to be published in November 2016 (without data for 2016), but it was decided that further validation was necessary.

## **7 Comparability**

The statistics are published for the first time. The statistics are not published by year and comparisons over time is therefore not possible. There are no comparable international statistics. It is possible to compare with the ordinary statistics for vocational education.

### **7.1 Comparability - geographical**

To the knowledge of Statistics Denmark, there is no international statistics that is comparable.

### **7.2 Comparability over time**

Because the statistics has not been published before, there are no prior publications to compare with.

Because the statistics are not published by year, it is not possible to compare across time.

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

The statistics are closely connected to the ordinary statistics about vocational educations, because both statistics use the same sources and describe the same educational field: [Vocational education](#)

### **7.4 Coherence - internal**

Not relevant for these statistics.

## **8 Accessibility and clarity**

These statistics are published in a Danish press release. No data is publicized in StatBank Denmark. It is possible to buy customized solutions with the data from [DST Consulting](#) and to access micro data through [Statistics Denmark's Research Services](#).

### **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**

The statistics are published in a [Danish press release](#).

## **8.5 Publications**

Not relevant for these statistics.

## **8.6 On-line database**

At the moment, there are no tables in StatBank Denmark about the subject.

## **8.7 Micro-data access**

Researchers and other analysts from authorized research institutions, can be granted access to the underlying micro data by contacting [Research Services](#).

## **8.8 Other**

DST Consulting has access to the data and can use it in standard solutions and customized solutions.

## **8.9 Confidentiality - policy**

[Data Confidentiality Policy](#) at Statistics Denmark is followed.

## **8.10 Confidentiality - data treatment**

At the detail level which the statistics are published, it has not been necessary to implement any special measures to secure discretion.

## **8.11 Documentation on methodology**

There are no separate method documents for these statistics.

## **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 is in the division of Population and Education. The person responsible is Nikolaj Kær Schrøder Larsen, tel.: + 45 3917 3259, e-mail: [nkl@dst.dk](mailto:nkl@dst.dk).

### **9.1 Contact organisation**

Statistics Denmark

### **9.2 Contact organisation unit**

Population and Education, Social Statistics

### **9.3 Contact name**

Nikolaj Kær Schrøder Larsen

### **9.4 Contact person function**

Responsible for the statistics

### **9.5 Contact mail address**

Sejrøgade 11, 2100 Copenhagen

### **9.6 Contact email address**

[nkl@dst.dk](mailto:nkl@dst.dk)

### **9.7 Contact phone number**

+45 3917 3259

### **9.8 Contact fax number**

+45 39 17 39 99