



Extract from the report to the  
Public Accounts Committee on  
the teaching provided at the  
Danish universities

August  
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## I. Introduction and conclusion

1. This report is about the teaching, which is provided to the students by the Danish universities, and which constitutes a substantial part of the bachelor and master degree programmes. The study was launched at Rigsrevisionen's initiative in the autumn 2011.

2. In recent years, the number of university students has increased considerably with currently 125,000 bachelor and master students, i.e. an increase over 2006 of 24 per cent. Funding for education at the universities follows the number of students and has increased from DKK 5.6 billion in 2006 to DKK 6.8 billion in 2012.

In 2009, the Danish parliament (Folketing) decided to increase the taximeter for the humanities and social sciences programmes, and in the period 2010-2012 annual funding per student was increased by DKK 4,000 – 5,000 compared to 2009. The purpose of increasing the taximeter is to provide more and better research-based teaching to the students of humanities and social sciences.

A Danish study from 2009 showed that the students of humanities and social sciences received very little teaching. A large European study, which involved also Danish students, has since demonstrated a clear connection between the weekly amount of hours taught and the hours that students spent on private study. The fewer hours of scheduled teaching provided to the students, the less time they spent in total on their studies.

University programmes must be organised as full-time studies and the teaching must be research based. Many factors contribute to assuring high-quality education. Two essential quality parameters for research-based full-time studies are the number of hours taught, and the extent to which students are taught by academics who also do scientific research. How many scheduled hours of teaching the bachelor and master students must receive is not centrally determined, but during accreditation of the programmes, the extent to which the students are taught by active researchers is assessed.

3. This study of the research-based teaching provided at the universities is comparative, and we compare the total number of hours taught and the number of hours taught by academics both between the universities and the primary academic fields. No national data on how many hours of scheduled teaching the universities provide to the students or how much of the teaching that is provided by academics is available. Rigsrevisionen has therefore conducted a survey among the directors of studies of 100 study programmes, corresponding to more than one tenth of the programmes offered by the universities.

4. The objective of the study is to assess whether the universities provide the bachelor and master degree students with research-based teaching (measured in total number of hours taught and hours taught by academics), and whether the increased taximeter level has improved the quality of teaching in humanities and social sciences.

The bachelor and master degree programmes are research-based university programmes provided within humanities, social sciences, natural sciences, technical sciences and health sciences.

### Taximeter

The taximeter system is based on the allocation of grants to institutions according to their level of activity: Many students receive a large grant, few students a small grant.

Accreditation is assessment of whether a study programme or an institution meets a number of predefined quality criteria.

Danish universities must be accredited to qualify for government funding.

The report answers the following questions:

- What is the status of research-based teaching at the Danish universities and has the increased taximeter resulted in more and improved research-based teaching in humanities and social sciences?
- Do the universities ensure that all programmes offer the students research-based teaching?
- Does the Ministry of Education through accreditation ensure that all programmes provide research-based teaching?

### MAIN CONCLUSION

**University programmes must be organised as full-time studies and teaching must be research-based. The total number of hours taught and the number of hours taught by academics are therefore two essential indicators of the quality of study programmes.**

As a result of the taximeter increase in the period 2010-2012, the universities are now generally in a better position to provide more and better research-based teaching in humanities and social sciences. Yet in spite of the taximeter increase, the students attending a number of study programmes receive few hours of scheduled teaching, and only a minor part of the teaching is provided by academics; a bachelor student of humanities receives an average of only eight hours of scheduled teaching per week, and a master student receives five hours of scheduled teaching per week. In social sciences, the average number of hours taught by academics is slightly lower than for the other study programmes. Rigsrevisionen has seen examples within the social sciences programmes where academics provide as little as approximately 20 per cent of the teaching. The low number of hours taught carry the risk that the students are not studying full-time, and the low number of hours taught by academics in some programmes may have the consequence that the students do not receive sufficient research-based teaching.

The Danish universities are independent institutions obliged to provide research-based education, including teaching provided by academics. Generally the universities are neither strategically nor financially aiming to ensure that the students receive a minimum of research-based teaching. The universities are to some extent restricted by the very different financial frameworks set for their activities. In recent years appropriations for the universities have been increased and several of the universities have recorded large surpluses and growth in their equity capital. Rigsrevisionen finds that the universities should decide on a standard for the total number of hours to be taught and number of hours to be taught by academics, and let this guide management of the range of study programmes provided. Rigsrevisionen also finds that the universities should more extensively use their independence and financial latitude to prioritise and take actions to ensure that the students receive a minimum of research-based teaching.

Nor does the Ministry of Education through accreditation ensure that the universities provide a minimum of scheduled hours of teaching, as hours of scheduled teaching provided are not included in the accreditation. The accreditation process includes assessment of the extent to which academics provide the teaching, but the minimum requirements applying to the primary academic fields differ. The lowest requirement is set for the social sciences programmes where 55 per cent of the teaching must be provided by academics.

The Ministry of Education does not on a regular basis collect data on total number of hours taught and hours taught by academics on the study programmes. One of the reasons for this is that *teaching* and *teaching provided by academics* have not been sufficiently defined. This represents a problem for the accreditation of the study programmes, because the data collected by the universities is not always reliable. As a consequence of the inadequacy of data, Rigsrevisionen had to conduct its own survey to collect information on scheduled teaching hours. Being independent institutions, the universities must ensure a high degree of transparency in relation to the services they provide like, for instance, the teaching. Rigsrevisionen finds that the ministry should head the efforts to define and develop essential key indicators for the teaching provided at the universities.

Rigsrevisionen finds that the universities must be able to provide evidence that the total number of hours of scheduled teaching and the number of hours taught by academics suffice to ensure that the students are offered a high-quality full-time study. Rigsrevisionen also finds that the Ministry of Education must contribute actively in the efforts made by the universities to achieve this objective.

The main conclusion is based on the following sub-conclusion:

*What is the status of the research-based teaching at the Danish universities and has the increased taximeter resulted in more and improved research-based teaching in humanities and social sciences?*

Rigsrevisionen's study has shown that the students of humanities generally receive too few hours of scheduled teaching. On average a bachelor student of humanities receives only eight hours of scheduled teaching weekly and a master student five hours weekly. In comparison a bachelor student of natural sciences/technical sciences receive a weekly average of 18 hours of scheduled teaching and a master student 13 hours. As the hours of scheduled teaching and the total workload are connected, very few scheduled hours of teaching may have the consequence that the workload of the students does not correspond to a full-time study.

The ratio of teaching provided by academics to teaching provided by other staff is lowest in the social sciences field, with academics providing an average of 60 per cent of the teaching. In comparison, academics provide 88 per cent of the scheduled teaching in natural sciences/technical sciences. In one fifth of the largest social sciences programmes, academics provide 50 per cent or less of the scheduled teaching, and Rigsrevisionen has seen examples where only approximately 20 per cent of the scheduled teaching was provided by academics.

As a result of the taximeter increase, many of the humanities and social sciences programmes are in 2011 providing more scheduled hours of teaching to the students and/or have increased the number of hours that are taught by academics, compared to 2009. The degree to which the number of scheduled teaching hours and ratio of hours taught by academics has been increased vary, but for 21 per cent of the programmes neither the level of scheduled teaching hours nor the level of hours taught by academics have been raised. The humanities programmes are still providing the lowest number of scheduled teaching hours despite the taximeter increase, and the social sciences programmes still record the lowest number of scheduled hours provided by academics.

*Do the universities ensure that all the programmes offer the students research-based teaching?*

The management performed by the six universities included in this study only has limited focus on ensuring research-based teaching. None of the universities define targets for both number of scheduled teaching hours and number of hours to be taught by academics, and only a few define targets for one of the two. Moreover, only few universities collect comparable data on key indicators concerning the teaching, which could provide the basis for potential adjustments.

Nor do the universities allocate funds in a manner that secures a minimum of research-based teaching for the students. The reason is that generally the universities allocate funds in accordance with principles that resemble those governing government appropriations, i.e. the overall political prioritisations in the sector on a whole, and not specific considerations for the operation of the individual university. This approach to allocation of funds means that the amount allocated to the natural sciences/technical sciences faculties per student is up to five times higher than the amount allocated to the social sciences faculty.

Generally the faculties are more focused on managing the research-based teaching, but the faculties of humanities and social sciences have only limited opportunities to ensure that the students receive sufficient research-based teaching, because they have considerably less funds than the other faculties.

As a result, the universities are not ensuring a minimum level for research-based teaching in all study programmes. Rigsrevisionen finds that, the universities should devote increased attention to ensuring more scheduled teaching hours and more hours taught by academics – in particular in humanities and social sciences. This can be achieved, for instance, by defining targets or minimum standards for the research-based teaching.

Five out of six universities have allocated the taximeter increase in largely the same way as they allocate teaching grants. This means that the majority of the additional funds have been awarded to faculties and departments, which have subsequently been in a position to offer the students more and better research-based teaching in humanities and social sciences. This allocation of funds also means that the universities have deducted the usual contributions, for instance, for administration and buildings from the additional funds.

*Does the Ministry of Education through accreditation ensure that all study programmes provide research-based teaching?*

The Ministry of Education is not through accreditation ensuring that the students receive a minimum of teaching. The number of scheduled hours of teaching is not part of the accreditation of the study programmes and study programmes with less than three scheduled teaching hours per week have been accredited. Nor does the ministry through accreditation ensure a general minimum level for the number of scheduled hours that should be taught by academics, because the accreditation requirements in respect to number of hours being taught by academics depend on which of the six faculties that provide the study programme. The minimum requirement set for hours to be taught by academics is highest for the natural sciences/technical sciences programmes, i.e. 85 per cent and lowest for the social sciences, i.e. 55 per cent. However, the minimum requirements are not unconditional, and therefore study programmes providing fewer hours taught by academics can be accredited. It is Rigsrevisionen's assessment that the social sciences minimum requirement is low considering that teaching at the universities to a large degree must be provided by academics.

The Ministry of Education is not monitoring the general level of research-based teaching at the universities, and the ministry does not have access to data on the number of scheduled teaching hours and hours taught by academics broken down on study programmes. To this should be added that the data used for accreditation is not always reliable and in the opinion of Rigsrevisionen, this affects the quality of the accreditation. Although the Folketing has commissioned ACE Denmark to perform quality assurance of the research-based teaching, Rigsrevisionen is of the opinion that the ministry is responsible for ensuring that reliable data is available to the accreditation process.

Rigsrevisionen also finds it essential that the Ministry of Education develops and uses data on the research-based teaching in its efforts to assure the quality of teaching. This approach will allow the ministry to convert existing knowledge into practice when administrative or political decisions are called for in the area.

The Ministry of Education has indicated that it agrees with Rigsrevisionen's conclusion concerning the importance of accumulating more knowledge of the teaching provided by the universities.