



Extract from the report to the  
Public Accounts Committee on  
effective use of the working hours  
of upper secondary school teachers

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## I. Introduction and conclusion

1. This report is about effective use of the working hours of upper secondary school teachers. The Public Accounts Committee has asked Rigsrevisionen to answer a number of questions prompted by the annual OECD report 'Education at a Glance' from which it appears that teachers in upper secondary general education in Denmark have the lowest number of teaching hours among the OECD member countries. The Ministry of Children and Education's most recent analysis from 2012 of teachers' working time in upper secondary general education showed that the proportion of time devoted to teaching averaged 22 per cent of the total working time in the school year 2010/2011.

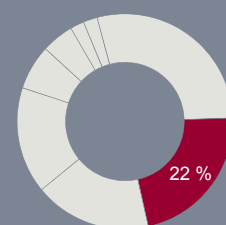
2. The amount of work done by Denmark's upper secondary general level teachers corresponds to approximately 12,500 man-years. However, the number of upper secondary school teachers exceeds 12,500, as not all teachers work full-time. Across the country, a total of approximately 240 educational institutions provide one or several types of upper secondary general education and they provide tuition to a total of approximately 132,000 students. Funds for upper secondary general education are provided for in the Budget by the Danish parliament every year and amount to approximately DKK 11 billion of which approximately DKK 6.6 billion is reserved for teachers' salaries. This study is focused on upper secondary examination programmes that are provided in the general upper secondary schools (stx) and higher commercial examination programmes (hhx) and higher technical examination programmes (htx) that are provided at the vocational upper secondary schools. Combined these three education programmes provide tuition to approximately 90 per cent of the total number of students attending upper secondary general education.

3. Upper secondary school teachers in Denmark work 1,680 hours annually, which corresponds to a working week of 37 hours. However, taking into account that the working hours of teachers in upper secondary general education are placed within the school year of 40 weeks, including exam periods, the weekly working hours are 42.

4. The statutory orders on the three upper secondary education programmes referred to above determine the contents of education programmes including the required number of teaching hours and how many written assignments the students must submit within the various subjects. The teachers' collective agreements are setting the framework for the allocation of time to the various tasks that teachers are required to perform. This means that the distribution of the teachers' working hours is primarily governed by a combination of legislation and the collective agreements.

5. The Public Accounts Committee has requested answers to five questions that can be summarised in two parts: The first part includes a review of data on the subject, including how many hours teachers in upper secondary education spend teaching, the development in teaching hours, differences in amount of teaching time across the upper secondary education programmes, and the amount of teaching hours in upper secondary education in Denmark compared with the other OECD member countries.

### Teaching time



Percentage of stx teacher's working time spent teaching.

### "Education at a Glance"

Since 1996, OECD has analysed the teaching time in upper secondary general education in this annual report on education statistics. The report compiles the statistic data collected by the individual OECD member countries.

The second part addresses the connection between teaching hours in upper secondary education on the one hand and the quality of upper secondary general education programmes, completion rates and the institutions' ability to use resources to their full potential, on the other hand. Yet, the number of teaching hours provided by upper secondary school teachers has no implications for the number of hours that a student must be taught in the course of an education programme because the number of teaching hours is determined by law. This means that the less time the teachers spend teaching, the more teachers are required to provide the teaching hours that the students are entitled to. The report is therefore not addressing directly the relationship between the number of teaching hours provided in upper secondary education and the students' completion rates or the quality of the education provided.

Rigsrevisionen has examined whether the upper secondary schools use the teachers to their full potential; do the educational institutions take into consideration, for instance the nature of the work tasks and differences in the qualifications of the teachers to perform their duties, when time is allocated to the various duties that the teachers are required to perform.

### MAIN CONCLUSION

**Rigsrevisionen finds that neither the general upper secondary schools nor the vocational upper secondary schools use the teachers' working hours effectively. The reason is that the time allocated to performing specific tasks is the same irrespective of the contents of the subject taught, the qualifications of the respective teachers to perform their duties or the fact that teachers may teach several classes in the same subject.**

**In the *general upper secondary schools* the collective agreement only allows the management of the individual school marginal influence on how the teachers' working hours should be used. The management and the teachers' trade union representative can enter a local agreement on the allocation of time that deviates from the central collective agreement. Rigsrevisionen's audit showed, however, that the local negotiations between the schools and teachers lead to agreements that are only marginally different from the collective agreements in terms of how the teachers' time is used.**

**Preparing lessons consumes most of the teachers' working time. According to the teachers' collective agreement and the local agreements entered in the individual general upper secondary schools, the teachers are entitled to a fixed number of minutes for preparation of each teaching lesson. The amount of time allocated to preparation of lessons is neither founded on any pedagogical considerations nor on the objective or contents of the respective lessons. As a result of this policy all teachers are entitled to the same amount of time to prepare lessons irrespective of subject, the teachers' experience or the fact that teachers teach several classes on the same level in the same subjects. The same rules apply to the time allocated to correction of written assignments, planning and holding exams.**

**At the vocational upper secondary schools the management is formally in a better position to prioritise the working hours of the teachers. The collective agreement for teachers at the vocational upper secondary schools is not stipulating the same requirements to negotiations between the management and the teachers' trade union representative on, for instance, the amount of time allocated to preparation of lessons. Yet Rigsrevisionen's audit showed that the management of the vocational upper secondary schools allocate time in accordance with the fixed rates that apply in the general upper secondary schools. One of the reasons is that the teachers at the vocational upper secondary schools insist on having the same rights as the teachers in the general upper secondary schools, because they perform largely the same tasks. This makes it difficult for the management to seize the opportunities provided by the collective agreement.**

**Rigsrevisionen therefore recommends that the Ministry of Finance and the Ministry of Children and Education, in the future collective bargaining, should work towards expanding the actual opportunities of the school management to prioritise the working hours of the teachers. The ministries should also consider how they can support the management in upper secondary education in their efforts to seize the opportunities provided by the collective agreements.**

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

#### **Part 1: Data on teaching time**

##### *The teaching time of upper secondary school teachers*

According to the report on teaching time in upper secondary general education published by the Ministry of Children and Education in 2012, teachers in the general upper secondary schools, in the school year 2010/2011, spent 22 per cent of their working hours teaching, 29 per cent preparing lessons, 18 per cent on other activities, 16 per cent correcting assignments and 7 per cent preparing/organising exams. The balance of time was spent on breaks, handling administrative tasks and reduction of the working hours for teachers over 60 years of age.

##### *The development in the working hours of upper secondary school teachers*

The Ministry of Children and Education has calculated the working hours of upper secondary school teachers on three occasions since 2007. Rigsrevisionen finds that the three statements are comparable and provide a fair picture of the teachers' working hours. According to the statements, the number of hours that teachers spend teaching has largely remained unchanged for the past five years, i.e. between 22 and 23 per cent of total working hours.

The data compiled by the Ministry of Children and Education before 2007 concerning the teaching time in upper secondary general education are not comparable with the subsequent statements due to differences in the method of calculation. It appears from the OECD analyses conducted in the period 1996-2011 that the teaching time in upper secondary general education ranges from minimum 364 hours to maximum 560 hours. The variances do not, however, reflect any actual changes in the teaching time, but can be ascribed to different methods of calculation.

### *Variances in teaching time between upper secondary education programmes*

The Ministry's latest study, which comprised all upper secondary general education programmes, showed that the teachers at the vocational upper secondary schools teach slightly more than teachers in the general upper secondary schools. The difference is just under 50 hours annually and can be ascribed to the terms of the collective agreements and local agreements on working hours.

### *International variances in teaching time*

The teaching time in upper secondary general education in Denmark is below the OECD average. In the most recent report published by the OECD in 2011, the average teaching time for OECD member countries was 656 hours against Denmark's 377 hours. The OECD has also calculated the proportion of teaching time of total working hours. This exercise showed an OECD average of 41 per cent against the 22 per cent resulting from the most recent Danish study of the teachers' working hours. Teaching time in upper secondary general education in Denmark has been below the OECD average for the entire period 1996-2011 notwithstanding the differences in methods of calculation.

The variances between the OECD member countries occur mainly because the countries use different methods for calculation of the teaching time, but also differences in education programmes and the provisions governing the teachers' working hours may have an impact.

## **Part 2: Deployment of teachers in upper secondary general education**

The collective agreements for general upper secondary schools and vocational upper secondary schools, respectively, determine the amount of time that teachers should be allocated to perform their duties. The collective agreements also allow the management and the trade union representative in the individual upper secondary school to enter a local agreement with the teachers on allocation of time to various work tasks. Generally, these local agreements prescribe only minor adjustments compared with the collective agreements.

In particular the management in the general upper secondary schools are not, as a consequence of the collective agreement, in a position where they can prioritise how they would like to deploy the teachers. The management are, for instance, not allowed to take into account the experience of the individual teacher when they allocate time to perform work tasks, nor can they prioritise preparation for specific lessons over others despite the fact that some subjects are largely static and others are in constant development. Neither can the management reduce the preparation time allocated to teachers that teach several classes in the same subject on the same educational level despite the fact that the students are taught the same subject matter. It could also be relevant to include factors relating to the size and composition of classes when time is allocated to the teachers.

In both collective agreements, approximately 10 per cent of the teachers' working hours in upper secondary general education are earmarked for teachers who have attained the age of 60 and are entitled to a fully compensated reduction in their annual working time of 175 hours. This scheme costs the upper secondary education institutions approximately DKK 120 million annually. According to the Ministry of Finance and the Ministry of Children and Education the scheme has roots in the past, it is entirely age-conditioned and does not take into account the needs of the individual teacher to have his or her working hours reduced.