

## TALIS 2018 RESULTS: UPPER SECONDARY EDUCATION

The OECD Teaching and Learning International Survey (TALIS) is an international, large-scale survey of teachers, school leaders and the learning environment in schools. This note presents findings based mainly on the reports of teachers and their school leaders in upper secondary education (ISCED level 3) in mainstream public and private schools. Some data from teachers and school leaders in lower secondary education (ISCED level 2) are noted throughout the document as points of comparison.

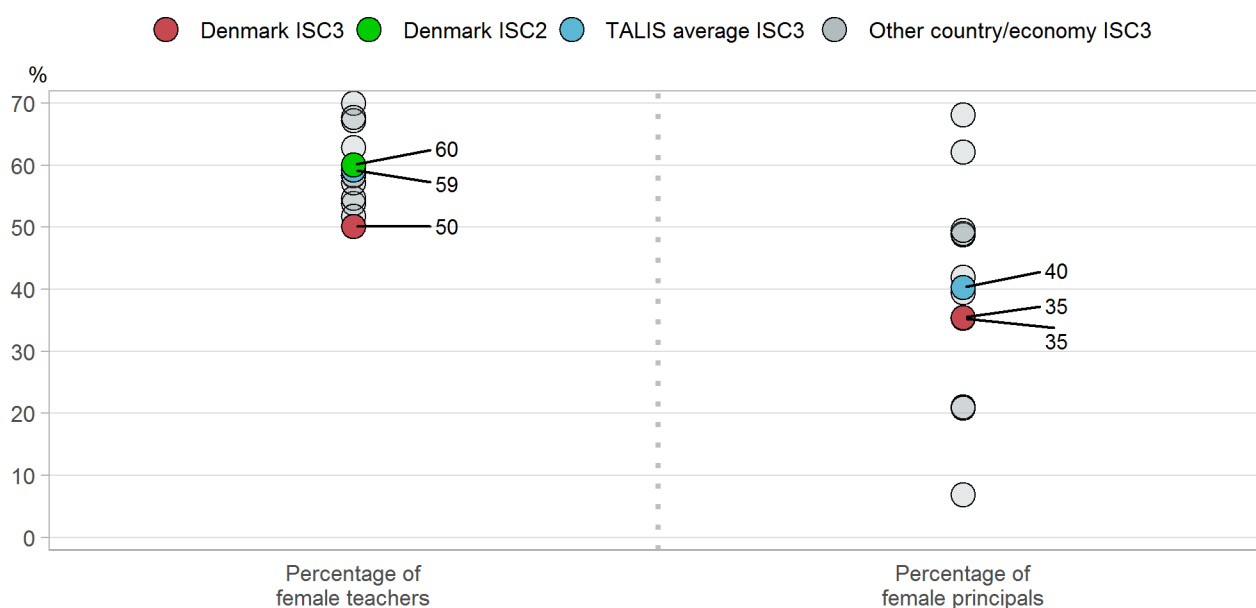
### Denmark

#### I. Who are today's principals and teachers in upper secondary education?

- In Denmark, teachers in upper secondary education are, on average, 46 years old, which is higher than the average age of teachers across the countries and economies participating in TALIS for upper secondary education (44 years old). Furthermore, 36% of teachers in upper secondary education in Denmark are age 50 and above (average 30%). Notwithstanding possible changes due to the size of the student population and changes in class size, this means that Denmark will have to renew about three in eight members of its teaching workforce over the next decade or so.

#### Figure 1. Gender profiles of teachers and school leaders

Results based on responses of teachers and principals in upper and lower secondary education



Notes: ISC3 stands for ISCED level 3 and refers to values concerning upper secondary education. ISC 2 stands for ISCED level 2 and refers to values concerning lower secondary education. Only countries and economies with available data are shown.

Source: OECD, TALIS 2018 Database, Tables 2.9 and 2.12.

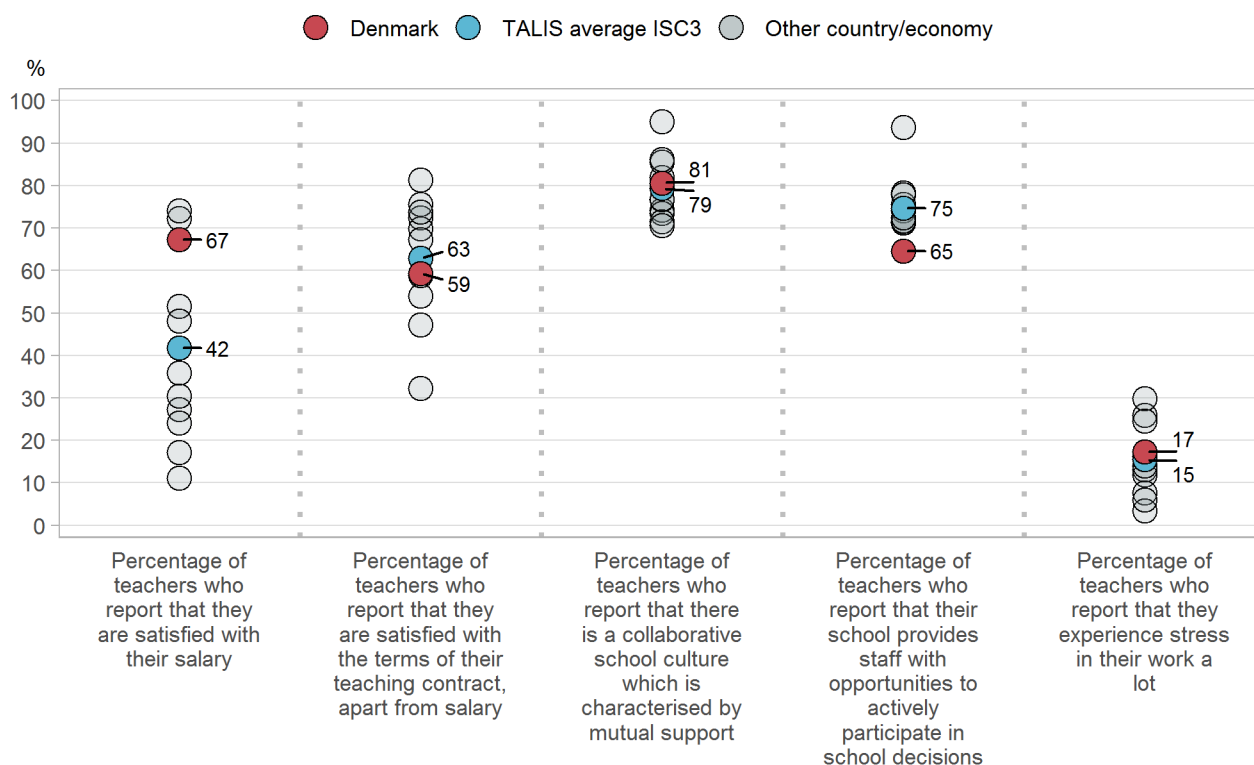
- In Denmark, teachers in upper secondary education have, on average, a total of 14 years working as teachers, which is lower than the average in the countries and economies participating in TALIS (16 years). Furthermore, teachers in upper secondary education have, on average, a total of 5 years of experience in other non-educational roles (average across participating countries and economies 4 years), compared to 4 years on average in lower secondary education.
- Information about the gender distribution of the teacher and principal workforces makes it possible to gauge the degree of gender imbalance in the teaching profession and of gender disparities in the scope for promotion to leadership positions. In Denmark, 35% of principals in upper secondary education are women, compared to 50% of teachers. In lower secondary education in Denmark, 35% of principals are women, compared to 60% of teachers.
- Female teachers might be particularly absent in certain areas and subjects. For instance, in Denmark 17% of female teachers instruct science, technology, engineering, and mathematic subjects (STEM) compared to 31% of male teachers. Regarding vocational education training, 8% of female teachers instruct subjects in this area compared to 15% of male teachers.
- Career stability, mobility and working conditions could play a large role in teachers' reported levels of satisfaction. In Denmark, 93% of teachers in upper secondary education have a permanent contract (an ongoing contract with no fixed end-point before the age of retirement) (average across participating countries and economies 80%). At the same time, 80% of teachers in upper secondary education in Denmark are employed full-time (across all their employments), which is statistically not significantly different from the average in the countries and economies participating in TALIS (81%).

## II. What teachers in upper secondary education say about their jobs?

- The status of the teaching profession can be an important factor for recruiting and retaining teachers. To get a sense of the perceived status of the teaching profession, TALIS 2018 asked teachers whether they believe that teaching profession is valued in society. In Denmark, 38% of teachers in upper secondary education “agree” or “strongly agree” with the statement that their profession is valued in society, which is statistically not significantly different from than the average across participating countries and economies (37%).
- TALIS defines job satisfaction as the sense of fulfilment and gratification that teachers get from their work. Job satisfaction may have a positive association with teachers' attitudes towards their work and with their performance. In Denmark, 89% of teachers in upper secondary education reported that, all in all, they are satisfied with their job (average across participating countries and economies 90%). Moreover, 59% of teachers in upper secondary education are satisfied with the terms of their teaching contract (apart from salary) (average across participating countries and economies 63%). In Denmark 67% of teachers in upper secondary education reported being satisfied with their salaries (average across participating countries and economies 42%).
- Teachers' perceptions of their colleagues and school environments are also crucial factors in teachers' satisfaction. In Denmark 81% of teachers in upper secondary education reported that there is a collaborative school culture that is characterised by mutual support (average across participating countries and economies 79%). Moreover, a crucial component of teachers' work satisfaction is having the opportunity of being heard in their workplace: 65% of teachers in upper secondary education in Denmark reported that their school provides staff with opportunities to actively participate in school decisions. (average across participating countries and economies 75%).

**Figure 2. Teachers' working conditions, stress and satisfaction**

Results based on responses of teachers in upper secondary education



Notes: ISC3 stands for ISCED level 3 and refers to values concerning upper secondary education. Only countries and economies with available data are shown.

Source: OECD, TALIS 2018 Database, Tables 5.9, 6.19 and 6.24.

- Acute stress at work can be associated with teachers' job satisfaction and their intention to continue teaching. Furthermore, stressful environments and situations may affect the practices and motivation of teachers and principals, and even student achievement. In Denmark, 17% of teachers in upper secondary education reported experiencing stress in their work "a lot", which is statistically not significantly different from the average across upper secondary education (15%).
- Almost half of the teachers in upper secondary education in the countries and economies participating in TALIS reported that having too much administrative work is a source of stress they experienced at work "quite a bit" or "a lot". In Denmark, the three most prevalent sources of stress teachers in upper secondary education experienced at work "quite a bit" or "a lot" are having too much marking, having too much lesson preparation and having too many lessons to teach. In lower secondary education, the three most prevalent sources of stress were having too much lesson preparation, having too many lessons to teach and having too much marking.

### III. How are teachers and school leaders trained in upper secondary education?

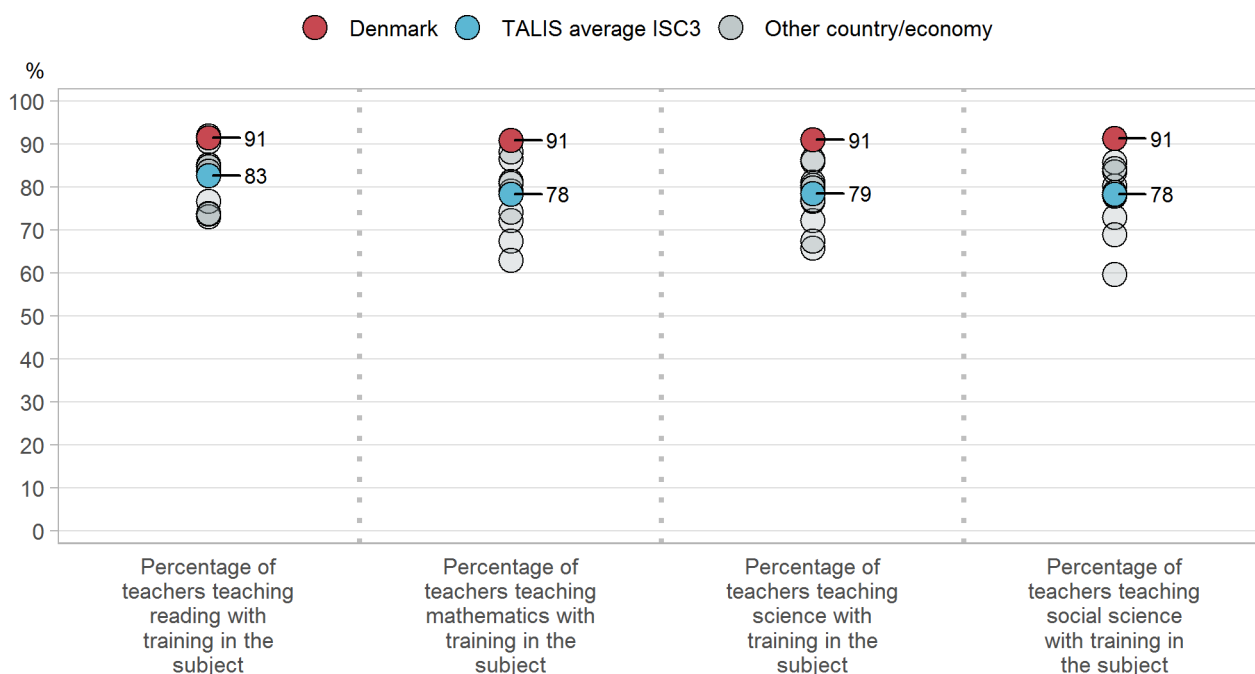
- During their initial education and training, 69% of teachers in upper secondary education in Denmark were instructed on subject content, pedagogy and classroom practice of some or all of the subjects they teach – a share that is lower than the average for teachers in lower secondary education (88%). In addition, 61% of teachers in upper secondary education reported having participated in some kind

of formal or informal induction when they joined their current school (with an average of 50% across participating countries and economies), compared to 37% of teachers in lower secondary education.

- Taking part in some kind of in-service training is commonplace among teachers and principals in Denmark, with 95% of teachers in upper secondary education (with a lower secondary education average of 92%) and 100% of principals in upper secondary education (98% on average in lower secondary education) attending at least one professional development activity in the year prior to the survey.
- Teachers in upper secondary education have the crucial role of ensuring indepth student learning in different subjects. TALIS findings indicate that in Denmark, 91% of reading teachers had training in reading and writing, 91% of mathematic teachers had training in mathematics, 91% of science teachers had training in science and 91% of social science teachers had training in social science. Education systems need to offer learning opportunities for teachers to receive training for the subject they teach and link their pedagogical skills to the specific subjects they teach.

**Figure 3. Teachers' training alignment with subject they teach**

Results based on responses of teachers in upper secondary education



Notes: ISC3 stands for ISCED level 3 and refers to values concerning upper secondary education. Only countries and economies with available data are shown.

Source: OECD, TALIS 2018 Database, Table 3.20.

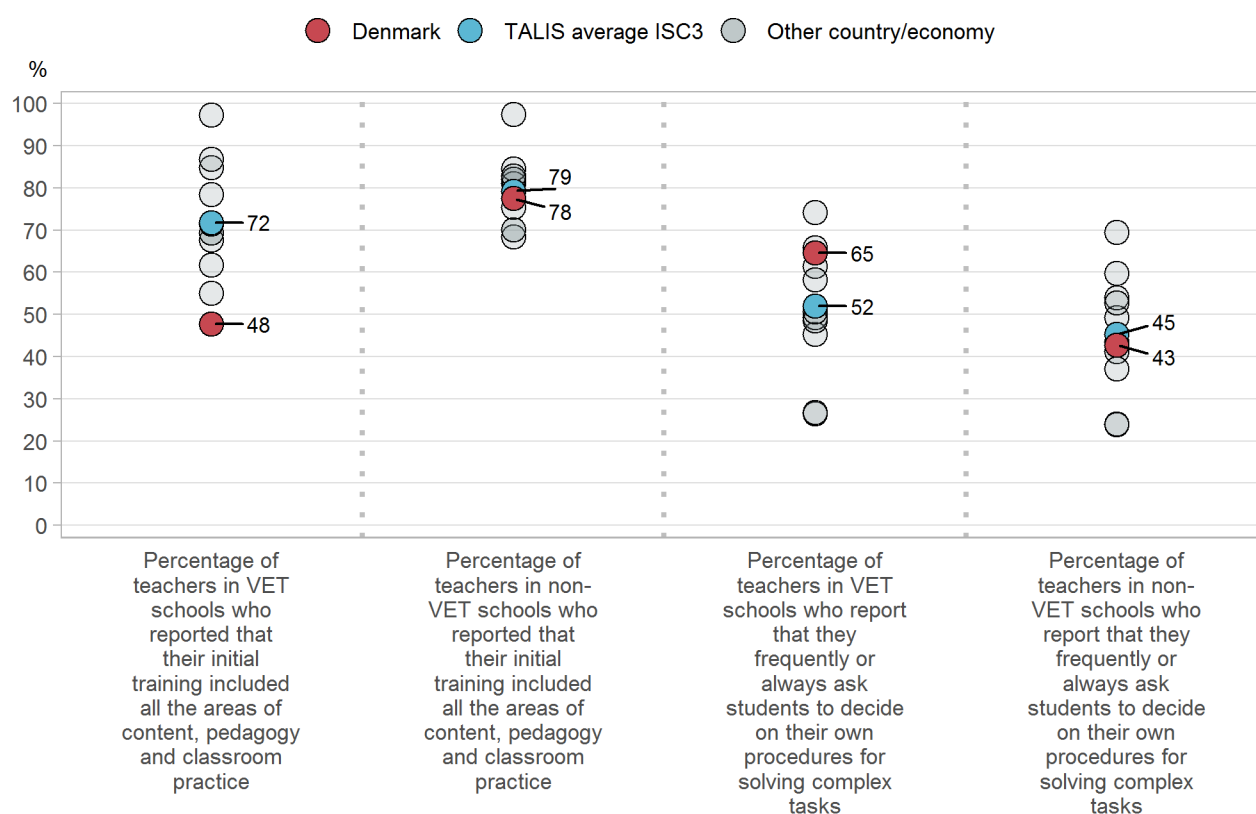
#### IV. How to support vocational education and training?

- Vocational education and training (VET) programmes are a cornerstone of upper secondary education. It is important to support VET teachers for their instructional and pedagogical roles. In Denmark, 48% of teachers who teach in a VET school said that their initial training included all the areas of content, pedagogy and classroom practice, compared to 78% of teachers who reported receiving this training in schools not offering a VET programme.
- Another relevant finding concerns the frequency of implementing pedagogical practices able to stimulate students cognitively (instructional activities that require students to evaluate, integrate and apply knowledge within the context of problem solving). For example, in Denmark, 65% of teachers in

VET schools report that they always or frequently ask students to decide on their own procedures for solving complex tasks in contrast to 43% of teachers in non-VET school.

**Figure 4. Training and practices of teachers in vocational education programmes**

Results based on responses of teachers in upper secondary education



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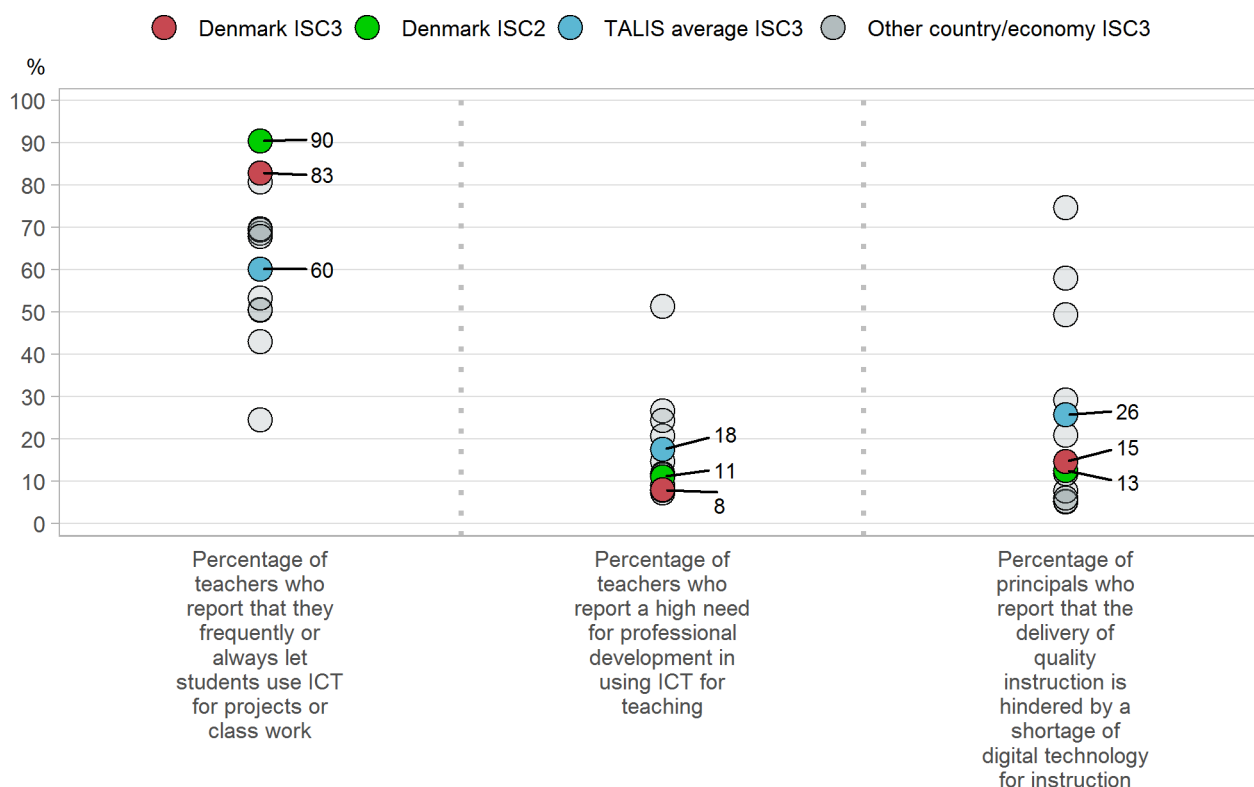
Source: OECD, TALIS 2018 Database, Tables 3.16 and 3.33.

## V. Supporting and strengthening ICT for teaching in upper secondary education

- The implementation of information and communication technologies (ICT) to support digital learning has gained unprecedented significance during the COVID-19 pandemic as it allows instruction and learning to continue when physical interactions between teachers and students are no longer possible. However, the effectiveness of such tools will be limited if they are not accompanied by a sufficient level of command of ICTs among both teachers and students.
- On average in Denmark, 83% of teachers in upper secondary education teachers “frequently” or “always” let students use ICT for projects or class work (average across participating countries and economies 60%), which is lower than the average in lower secondary education (90%).
- Regarding the training that teachers in upper secondary education receive in this area, in Denmark, 58% of teachers in upper secondary education reported that the “use of ICT for teaching” had been included in their formal education or training, and 54% of teachers on average felt prepared to teach in such settings when they finished their studies.

**Figure 5. A snapshot of supporting and strengthening ICT for teaching**

Results based on responses of teachers and principals in upper and lower secondary education



Notes: ISC3 stands for ISCED level 3 and refers to values concerning upper secondary education. ISC 2 stands for ISCED level 2 and refers to values concerning lower secondary education. Only countries and economies with available data are shown.

Source: OECD, TALIS 2018 Database, Tables 3.31, 4.23 and 5.28.

- Furthermore, in Denmark 8% of teachers in upper secondary education reported a high need for training in the use of ICT for teaching, compared to 11% in lower secondary education.
- Finally, on average in Denmark, 15% of school principals in upper secondary education reported that delivery of quality instruction in their school is hindered by a shortage or inadequacy of digital technology for instruction (compared to 26% across the OECD).

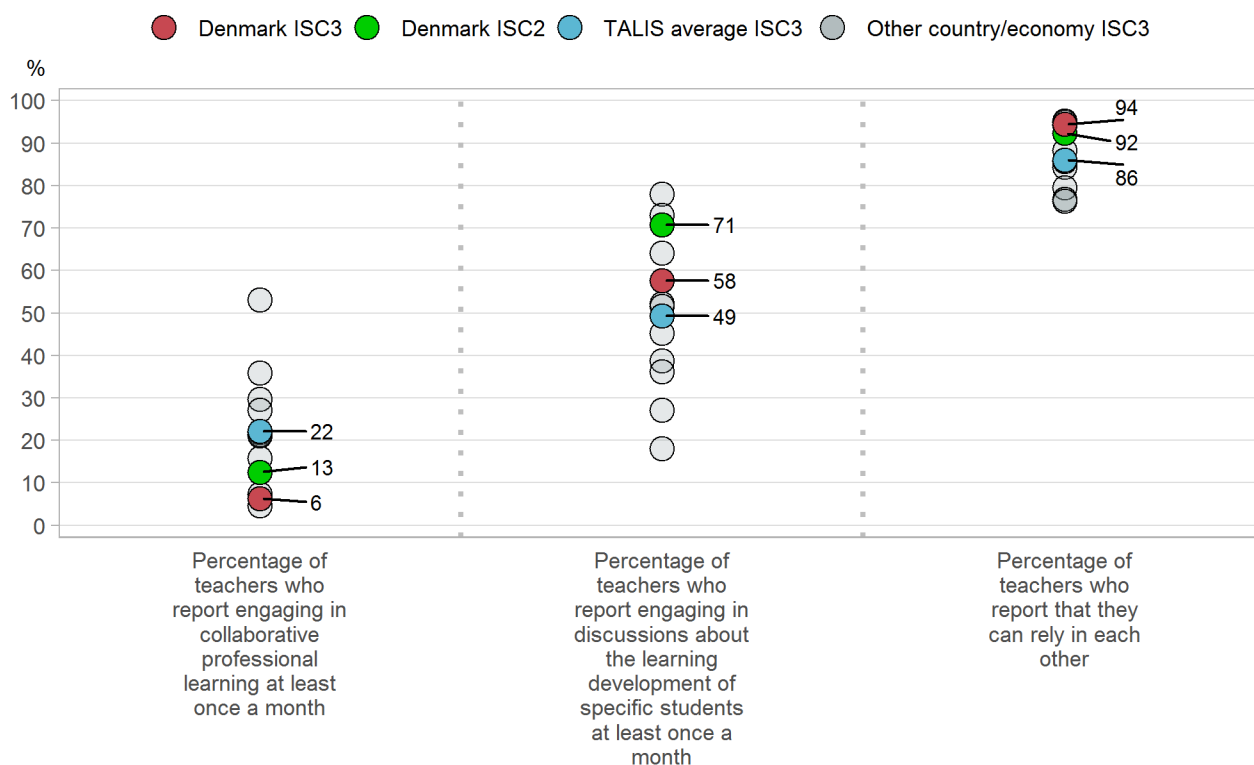
## VI. Promoting teacher collaboration and collegial relationships in upper secondary education

- Teacher collaboration is a key feature of school culture, not only for teachers' professional development but also for teachers' satisfaction and motivation. On average, TALIS data shows that engagement in collaboration could be further encouraged at the upper secondary education level. Collaborative professional learning is a form of professional development in which teachers work together in teams over time to improve teaching and learning. In Denmark, 6% of teachers reported engaging in collaborative professional learning in upper secondary education at least once a month (with an average of 22% across participating countries and economies), compared to 13% in lower secondary. Furthermore, 58% of teachers in upper secondary education stated that they engage in discussions about the learning development of specific students at least once a month (with an average of 49% across participating countries and economies), compared to 71% in lower secondary.
- A crucial factor to promote collaboration in schools could be the level of trust and support teachers feel with their colleagues. On average in Denmark, 94% of teachers in upper secondary education reported

that they can rely on one another other (with an average of 86% across participating countries and economies), compared to 92% in lower secondary.

**Figure 6. A snapshot of teacher collaboration and collegial relationships**

Results based on responses of teachers in upper and lower secondary education



Notes: ISC3 stands for ISCED level 3 and refers to values concerning upper secondary education. ISC 2 stands for ISCED level 2 and refers to values concerning lower secondary education. Only countries and economies with available data are shown.

Source: OECD, TALIS 2018 Database, Tables 2.29 and 5.22.

## Key features of TALIS 2018

TALIS uses questionnaires administered to teachers and their school principals to gather data. Its main goal is to generate internationally comparable information relevant to developing and implementing policies focused on school leaders, teachers and teaching, with an emphasis on those aspects that affect student learning. It gives a voice to teachers and school leaders, allowing them to provide input into educational policy analysis and development in key areas.

- Nine main themes were selected for inclusion in the TALIS 2018 survey: teachers' instructional practices; school leadership; teachers' professional practices; teacher education and initial preparation; teacher feedback and development; school climate; job satisfaction; teacher human resource issues and stakeholder relations; and teacher self-efficacy. Two cross-cutting themes were added to this list: innovation; and equity and diversity.
- The international target population for TALIS is composed of lower secondary teachers and their school leaders in mainstream public and private schools. Eleven countries and economies, including Denmark, also surveyed teachers and school leaders in their upper secondary schools (ISCED level 3).



- In each country, a representative sample of 4 000 teachers and their school principals from 200 schools was randomly selected for the study. Across all survey components, approximately 260 000 teachers responded to the survey, representing more than 8 million teachers in 48 participating countries and economies. In Denmark, 2 001 lower secondary teachers and 140 principals completed the TALIS questionnaires. In the case of upper secondary education, 1 670 teachers and 96 principals completed the TALIS questionnaires.
- All results presented in this country note can be found in the publication *Teachers Getting the Best out of Their Students: From Primary to Upper Secondary Education*, published on 28 September 2021. The sources of the data for Section I are: Tables 2.1, 2.5, 2.9, 2.12, 3.23, 3.24, 6.1 and 6.4; for Section II are: Tables 2.18, 5.9 6.16, 6.19, 6.24, 6.29 and 6.30; for Section III are: Tables 3.14, 3.20, 4.4, 4.13 and 4.16; for Section IV are: Tables 3.16 and 3.33; for Section V are: Tables 3.7, 3.13, 3.31, 4.24 and 5.28; and for Section VI are: Tables 2.29 and 5.22.
- The production of the country notes has been automatised in the R software following syntaxes developed by Markus Schwabe.


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## References

OECD (2021), *Teachers Getting the Best out of Their Students: From Primary to Upper Secondary Education*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/5bc5cd4e-en>.

For more information on TALIS 2018 visit <http://www.oecd.org/education/talis/>

Data can be found also on line by following the **StatLinks**  under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using: <http://gpseducation.oecd.org/>.

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