European Commission

The Teaching Profession in Europe

Practices, Perceptions, and Policies

Eurydice Report

Education and Training

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FOREWORD

Teachers play a crucial role in the lives of pupils. They guide them towards their goals and shape their perceptions. That is why 'Education and Training 2020', Europe's strategy in the field of education and training, puts a special emphasis on the role of teachers – from their selection, initial education and continuous professional development to their career opportunities.

Investment in teachers is crucial, as reiterated in the Council Conclusions on effective teacher education in May 2014: Ministers agreed that Member States need to raise the quality of the teaching profession and make it more attractive and prestigious. This means that they have to carefully select and recruit teachers, provide them with effective education, retain them in the profession, give them early career support, and offer them regular opportunities to renew their skills and competences, including those based on new technologies.

I am therefore pleased to introduce this new Eurydice publication. It provides evidence on how environments determine the work of teachers, and how different conditions affect their perceptions and practices. For the first time, a Eurydice report combines qualitative information collected through the Eurydice Network with extensive quantitative data gathered through the OECD Teaching and Learning International Survey and Eurostat data. This publication will therefore be very valuable in developing evidence-based policies that help address today's challenges in teaching.

Education transmits important values such as freedom, self-expression and tolerance, and it contributes to active citizenship, social cohesion and integration. Education systems across Europe are facing structural challenges which are aggravated by the economic crisis: fragmentation, under-investment, shortages of teachers and new technological developments calling for new learning models. These challenges should inspire us to innovate and keep reforming our education and training systems and to adapt them to societal demands and needs. In times of change, education is the determining long-term factor.

I invite policy-makers, researchers, teachers as well as those who educate and train them to make good use of this report when analysing systems, conceiving policies, and designing services. I am convinced that this publication can boost our joint efforts to ensure pupils across Europe benefit form first-class education.

Tibor Navracsics

Commissioner for Education, Culture, Youth and Sport

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EXECUTIVE SUMMARY

Teachers are of primary importance in learning at school. The need to optimise their contribution to it has naturally been endorsed at European level as an educational policy priority. Both the European Commission and the Council of the European Union have emphasised the need to improve teacher education, continuing professional development in teaching, and the attractiveness of the teaching profession. Data on what works and on policies likely to meet future challenges successfully are essential in order to improve the effectiveness, efficiency, and relevance of education systems in Europe.

This report focuses on around 2 million teachers working in lower secondary education (ISCED 2) in Europe and on the education systems concerned. It analyses the relation between the policies regulating the working conditions of teachers, and their own practices and perceptions. The report is based on secondary analysis of data from the 2013 OECD Teaching and Learning International Survey (TALIS 2013), as well as Eurydice and Eurostat/UOE data. It brings together quantitative and qualitative information from very different sources, combining factual data, the views of teachers, and the content of education policies and regulations.

The report examines five areas of primary importance for policy: (1) demographics and working conditions; (2) initial teacher education and the transition to the teaching profession; (3) continuing professional development; (4) transnational mobility; and (5) attractiveness of the profession.

Teacher demographics and working conditions

Teaching is a profession occupied mainly by women, with men comprising less than one-third of teachers. This gender imbalance is of concern to policy-makers, and the current distribution of teachers by age suggests that, in the short term, the number of men in teaching will diminish still further. Even in the few countries in which proportions of men and women teachers are similar, fewer men are now entering the profession than previously.

In Europe, only one-third of teachers are aged under 40. In some education systems the low share of young teachers paired with the retirement of older teachers could lead to severe shortages.

Lower secondary school education is largely provided by the public sector with very few exceptions. Nevertheless, working conditions can be very different across Europe, in terms of employment contracts, working hours, salaries, and retirement age. As regards retirement, however, many education systems are seeking to postpone the age at which teachers are eligible for full pension entitlement.

Initial teacher education

In initial teacher education (ITE) in almost half of the countries, teachers can choose whether to qualify via a concurrent route – involving integrated work on their intended school subject(s) and professional training – or a consecutive route in which professional training follows study of their subject. In 15 European countries, the minimum level of ITE programmes is that of a Bachelor's qualification, whereas 17 countries require at least a Master's degree. The minimum length of ITE is usually between four and six years.

Besides knowledge of their subject, prospective teachers have to acquire professional skills. Their professional training includes both theoretical studies (including psychology and the theory of teaching) and practical training in schools, which is likely to include the observation of teaching and sessions with direct responsibility for classroom teaching activity. Most countries have specified a minimum duration for professional training, which corresponds on average to 60 ECTS credits

equivalent to roughly a year of full-time training. In nine countries and mainly in the concurrent route through ITE, the minimum proportion of professional training is a matter for the institutions concerned. According to central regulations, in-school placements which are part of professional training correspond on average to 25 ECTS credits, although also in this respect institutions may exercise some level of discretion concerning the distribution of activities within professional training.

Within the EU, 91.2 % of teachers from all sectors (public, government-dependent, and independent private) have completed an ITE programme. This high proportion overall conceals big variations between countries, but in Europe as a whole, the proportions by age group of teachers who have completed ITE vary very little.

In order to prepare prospective teachers for their career as effectively as possible, the TALIS survey considers the integration in ITE of three key components as follows: sound academic knowledge of the subject(s) to be taught; the theory of teaching, including teaching skills, support for pupils during learning; and practical classroom experience enabling trainees to become adept at handling everyday issues in teaching and to manage classes in a wide variety of situations. Out of teachers in the EU who completed an ITE programme, 80 % said that their training included all foregoing three components. In almost three-quarters of the European education systems surveyed in TALIS 2013, the proportion was even higher.

A higher proportion of teachers in the EU feel very well prepared for their work in all three areas when they have completed an ITE programme than when they have not. Mastery of subject content does not seem to be a major concern. However, the results indicate that both the theory and practice of teaching should be included in ITE, where this is not yet the case, or qualitatively enhanced to better prepare future teachers.

Transition to the teaching profession

The first years in the profession are a key phase. During induction, newly fully qualified teachers carry out all or many of the tasks incumbent on experienced teachers and are paid for their work. In almost two-thirds of the countries considered, fully qualified first-time teachers working in the public sector have access to a structured induction phase usually lasting one school year. Induction is most often compulsory, although it is no more than recommended in a few education systems. In some countries, the induction phase is limited to mentoring. Almost 60 % of teachers in the EU with less than five years of teaching experience said that they had taken part in a formal induction programme when they entered the profession.

Several factors have been examined jointly to identify those with the greatest predictive value in considering whether new teachers will take part in an induction programme. Teachers aged under 40 appear to be more likely to have participated in an induction programme. This predictive factor has a positive impact in 10 education systems, in which less experienced teachers are more likely to have taken part in such a programme, and a negative value in five, in which more experienced teachers are more likely to have done so. The availability of such programmes in schools also has a predictive value in nine education systems, in which organisation of the programmes is wholly or partly a school responsibility. In other countries, the induction phase may be organised by teacher training institutions or the local, regional, or national public authorities.

While mentoring is the main type of support offered during an induction phase, it exists in almost all education systems, irrespective of whether they have an induction phase. The main predictive factor in the likelihood that new teachers will be assigned a mentor is a period of under five years of experience either as a teacher or at their school. This bears out the close link between mentoring and the

transition phase and demonstrates how the likelihood that young teachers will be assigned a mentor is higher. The third main predictive factor is the employment of new teachers on a fixed-term contract, which may be because in many countries they start with such a contract during their probationary period.

Not surprisingly, the experience and qualification of mentors are very different from those of the teachers they mentor. Mentors are experienced teachers, often employed on a permanent basis. Their own participation in an induction phase when they first began teaching increases in many countries the likelihood that they become mentors as experienced teachers. In some countries, they also get special training and other forms of support to help them with their task.

Continuing professional development of teachers

High proportions of teachers in all age groups and irrespective of their experience and school subjects have expressed a moderate or high level of training needs in areas that would allow them to develop more appropriate, diversified, and innovative teaching practices. They are especially concerned with needs under the headings of ‘teaching students with special needs’, 'ICT skills for teaching', 'new technologies in the workplace', 'approaches to individualised learning' and 'teaching cross-curricular skills'. These needs have been expressed quite uniformly and consistently throughout Europe and in individual countries. Conversely, relatively small proportions of teachers express moderate or high levels of need in ‘knowledge and understanding of my subject field(s)' and 'knowledge of the curriculum'. This might mean that while teachers on the whole feel at ease with their subject and the content of what has to be taught, they require training that strengthens their professional skills and teaching techniques.

The ranking of needs from most important to least important (in terms of the proportions of teachers expressing them) may indicate that they are aware of what quality education today is commonly thought to entail. Teachers need the resources with which they can transfer their priority focus from theory to the classroom, devoting their efforts above all to helping students take charge of their own learning, while teaching them in accordance with modern methods consistent with their individual necessities.

Throughout Europe, education systems define needs in different ways. In certain countries, the task of determining what teachers need is delegated to schools which sometimes perform it with the assistance of teachers themselves. However, in the majority of systems in Europe, the top-level education authorities are instrumental at least in outlining the major policy priorities for the professional development of teachers. That said, the scale of their contribution varies and ranges from the provision of a general framework with guidelines, to compulsory forms of training for all concerned. Yet in these countries, the overall needs expressed by teachers are greater than in those where top-level authorities do not play a role. It might be inferred that top-level authorities are not fully informed about teachers' needs which could be determined more accurately by paying due regard to teacher perceptions of professional development priorities. So while exclusively bottom-up approaches are not necessarily the answer, it might be possible to target real and perceived needs more effectively by giving a greater voice both to teachers and their schools in the process.

Demand for the topics of ‘ICT skills for teaching’ and ‘new technologies in the workplace’ in professional development remains high. Yet while around 30 % of teachers aged under 30 express a high or moderate need for these topics, over 60 % of teachers aged between 40 and 49 do so, as do those in higher age groups even more. Such contrasting trends point to the existence of a clear generation gap between teachers that has yet to be bridged.

Continuing professional development (CPD) is changing. Formal and traditional kinds of training, such as courses, workshops and conferences are still well represented in almost all education systems. However, other forms of CPD are emerging with activities that are more peer-based, collaborative, less structured, and focused on grass roots involvement. ICT-based kinds of CPD are also appearing, as in the case of teacher networks formed specifically for professional development, mentoring and peer learning. The preferred format or patterns of participation in CPD vary widely from one country to another. Education systems have an opportunity to learn from each other in terms both of practices, and of the policies and regulations that bring different approaches to professional development into being.

The time teachers spend on their CPD is partly related to its status in central regulations. In countries in which it is not considered a professional duty or a necessity for promotion, the trend (measured in days) is below the EU average, with involvement also in a lower-than-EU-average number of topics. By contrast, where CPD is regarded both as a professional duty and a requirement for promotion there is a tendency to exceed these EU averages. The way in which the central education authorities express involvement in CPD as a duty varies enormously. For some, it is just a nominal commitment, whereas others specify the completion of a minimum number of days or hours, and in certain cases one or more compulsory topics.

High proportions of teachers stated that their professional development activities contained topics for which the lowest percentages of teachers expressed a need. Conversely, in the case of many topics for which high percentages of teachers expressed a moderate or high need, relatively fewer said they covered these topics during their professional development activities. This points to the possible existence of a mismatch between what is offered by these activities and what teachers perceive to be necessary, suggesting that a readjustment to align the two would be welcome.

Incentives and supporting measures can help sustain teacher participation in CPD. However, they need to be devised carefully with due regard for their purpose. For example, positive correlations are apparent between the existence of paid study leave and involvement in individual or collective research, or the eligibility of teachers for direct funding and their enrolment in further study programmes. Yet negative outcomes cannot be discounted, given negative correlations also between (for example) the availability of free courses for teachers and their participation in specially created professional development networks The existence of a measure does not in itself guarantee higher CPD participation rates unless it is clearly linked to a policy goal that teachers regard as relevant.

Gender, employment status, and experience can affect perceptions of barriers to participation in CPD. While women indicate more commonly than men that family responsibilities are a barrier, male teachers perceive the lack of incentives as more daunting. Teachers on a contract that is not permanent view themselves as limited by the lack of prerequisites, while those who are permanently employed are more likely to indicate that CPD conflicts with their work schedule. While removing barriers to participation in CPD may be a strong enabling factor, the action needed to do so should target distinct groups of teachers, with due regard also for the participation rates and needs of each education system.

Transnational teacher mobility

Within the EU, 27.4 % of teachers have been abroad at least once for professional purposes for at least a week. The proportion is highest in the Nordic and Baltic countries. In half of the education systems surveyed, less than a third of all teachers appear to be transnationally mobile. In the EU,

12.4 % of respondents reported that they had gone abroad solely when they were already practising teachers, whereas 5.9 % had done so only during their ITE, and 3.6 % only in both cases.

In all countries surveyed except Iceland, modern foreign language teachers are the most transnationally mobile, compared to teachers of four other main subjects. However, the fact that within the EU almost 60 % of the former have been abroad for professional purposes also means that over 40 % of them have not, which might have negative implications for the quality of foreign language teaching. Teachers of science and of mathematics in the EU are the least transnationally mobile for professional purposes with under 20 % of them in this category. Iceland constitutes a marked exception to these trends as it has the greatest proportion of transnationally mobile teachers, whose involvement in professional activity abroad is consistently high irrespective of their school subject.

Transnational mobility occurs mainly in the case of teachers who are accompanying visiting students (44.2 % of teachers in the EU give this as their reason for going abroad), learning languages (39.6 %), and studying abroad as part of their teacher education (37.8 %). Only 20.4 % state that they went abroad to teach.

Top-level national schemes to support transnational teacher mobility exist in over half of the countries surveyed, most of them in western and northern Europe. However, the EU programme (now Erasmus+) is by far the main source of funding. Almost a quarter of mobile teachers went abroad for professional purposes under the EU programme, compared to a tenth in the case of national or regional programmes. Furthermore, the existence of a national (top-level) scheme does not necessarily result in a higher proportion of transnationally mobile teachers. Besides, half of the countries with a mobility rate below the EU average have no national (top-level) mobility scheme.

Eleven factors have been considered together to evaluate their predictive impact on transnational teacher mobility. In all countries except Iceland, modern foreign language teachers appear six times more likely to have been abroad for professional purposes. Participation in professional development activity in the 12 months preceding the survey was also a predictive factor in transnational mobility in the great majority of countries, but to a lesser extent. There is also some evidence that transnational mobility encourages teachers to engage in CPD. In 13 countries those who have taught for over 10 years are more likely to be transnationally mobile. Finally, permanent employee status and the gender impact of ‘being a man’ have predictive value in just seven countries.

Attractiveness of the teaching profession

The need to attract more appropriately qualified staff into the teaching profession is a growing priority in Europe. Almost all European countries or regions report that they have taken steps to help them forecast the likely future supply of teachers and demand for them. Twenty two European education systems have introduced forward planning of teaching staff requirements, while 28 rely on general labour market monitoring for insights into general workforce trends.

A dozen countries have implemented or are currently implementing promotion campaigns to enhance the image of the teaching profession and attract new recruits into teacher training, as well as newly qualified teachers into the profession. Most such campaigns are based on promotional video clips broadcast on nationwide TV channels, the use of social media, or websites providing practical information on teaching and ITE.

Job satisfaction and teacher perceptions of the value that society attaches to the teaching profession are good proxies for assessing its attractiveness for those who are its practitioners. In general, teachers are satisfied or very satisfied with their profession but consider that society does not value it.

As a rule, the job satisfaction of teachers tends not to be affected by their age, gender, or the number of years completed in service. Teachers who are satisfied with their school environment are also satisfied with their profession, and vice versa. Certain in-school factors, such as the evaluation of teachers, a school collaborative culture, and good teacher-student relations correlate positively with higher job satisfaction. As regards these factors, the belief on the part of teachers that evaluation is not an administrative task, but contributes helpfully to their professional development, and the existence of decentralised school leadership in which staff, parents, and students all have a voice in school administration and share responsibility for it are indeed significant. However, the variable most strongly affecting job satisfaction is teacher-student relations and the perception that teachers and students get on well together. In general, working conditions – with the exception of salaries – do not seem to be directly linked to levels of job satisfaction. While higher minimum salaries correlate positively with higher proportions of young teachers who express satisfaction with their job, the correlation between maximum salary levels and the professional satisfaction of older or more experienced teachers is insignificant. This might mean that increased salaries help to maintain professional satisfaction at fairly constant levels as teachers grow older.

Teachers who express satisfaction with their profession do not necessarily have a more positive perception of how society values it. These two variables are independent. In contrast to their own professional satisfaction, perceptions among teachers of how society values their profession are affected by their age and gender, with young men teachers conveying a more positive impression than other groups. As regards in-school factors, the belief that evaluation is a meaningful process leading to better approaches to teaching is the foremost variable affecting teacher perceptions of social attitudes to their profession. Some countries have conducted surveys of what teachers perceive is the value of their profession by society, and society's own valuation of it. Although such surveys differ in nature and scope, their results suggest that society holds the profession in higher esteem than teachers think, and that it is viewed as highly skilled and intellectually demanding. While employment status is clearly unrelated to more positive teacher perceptions, and working hours only marginally so, salary increases do seem to be relevant in this respect. Many education systems with a low 'coefficient of relative annual salary increase' are also among those with lower-than-EU-average percentages of teachers who believe that society values their profession. Conversely, education systems in which this coefficient is high are more likely to show higher-than-EU-average proportions of teachers convinced that the social valuation of the profession is high. This might mean that salaries affect teacher perceptions of this valuation when considered within the structures and mechanism of career progression.

INTRODUCTION

The current global socio-economic and technological context has placed education at the heart of Europe's strategy for sustainable competitiveness and development. Schools, however, face unprecedented challenges. Not only are they expected to deliver measurable results with reduced budgets, but also to be modern and forward-looking, offer an attractive curriculum, and prepare young people for as yet non-existent jobs. This renewed pressure on education systems impinges directly on the most important in-school factor affecting student attainment, namely the work of teachers. However, the teaching profession is not as attractive as previously. Many countries already face – or are set to face – shortages of qualified teachers, while the recruitment of highly qualified candidates is likely to be adversely affected by the diminished prestige of the profession. Meanwhile, an effort is needed to help new and in-service teachers meet new challenges by both broadening and refining their skills. Changes in technology, society, and patterns of accountability are requiring teachers constantly to revisit those skills and perform more effectively than ever before.

The strategic framework for education and training (ET 2020) agreed by the Council of the European Union now guides policy-related action in these fields. It identifies the quality of education and training as one of four strategic objectives, stating that 'there is a need to ensure high quality teaching, to provide adequate initial teacher education, continuous professional development for teachers and trainers, and to make teaching an attractive career-choice' ([1]), thereby ensuring that investment in human resources is a key factor in success.

As highlighted in the Communication from the European Commission, *Rethinking Education* ([2]), these challenges are also opportunities to undertake 'skills renewal across the profession' and help schools become more geared to the modern world. However, action is needed to renew recruitment and selection processes, as well as retention strategies; to make Initial Teacher Education (ITE) more effective while reinforcing the role of induction and mentoring; and to drive professional development towards more flexible, individualised, collaborative forms, and link it to teachers' career prospects and school development plans.

In 2014, the Council of the European Union also emphasised that teacher education is just one aspect of the wider policy objective of raising the attractiveness and quality of the profession, along with appropriate policies for teacher recruitment and retention, effective ITE and early career support. The EU Council further agreed that countries should ensure that teachers have regular opportunities to update their subject knowledge and to receive support and training in effective and innovative modes of teaching, including those based on new technologies ([3]).

This report offers a comparative analysis of different aspects of the teaching profession in Europe, in order to provide data relevant to policies that might enhance it. The report thus combines qualitative data on existing country-based regulations (for which the source is Eurydice) with statistical data from the 2013 OECD Teaching and Learning International Survey (TALIS) on the attitudes, opinions, perceptions, and practices of teachers and school heads, and statistical material from Eurostat/UOE on the teacher population in Europe. The added value of the report lies in its overall analysis of data from these different sources. It aims, therefore, to understand and, where possible, to explain the approaches and attitudes of teachers within national or regional contexts, informed by legislation and policies that regulate the profession and working conditions, and taking into account demographic elements.

([1]) Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), OJ C 119, 28.5.2009, p. 4.

([2]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions on Rethinking Education: Investing in skills for better socio-economic outcomes, COM/2012/0669 final.

([3]) Council conclusions of 20 May 2014 on effective teacher education, OJ C 183, 14.06.2014, pp. 22-23.

Content and structure of the report

The present report examines several issues that crucially affect the quality of teaching in schools, as well as, potentially, the recruitment of new teachers. In so doing, it focuses on lower secondary education (ISCED 2) in the 28 EU Member States, as well as in Iceland, Liechtenstein, Montenegro, the former Yugoslav Republic of Macedonia, Norway, Serbia, and Turkey, covering some 40 education systems in all.

The report is divided into five chapters. Chapter 1, first of all, sets out statistical data on teachers in Europe, including their age, gender and certain aspects of their working conditions such as their employment status, working hours, salaries, and retirement age. It is followed by four further chapters exploring the responses of teachers to the questionnaire used in the TALIS 2013 survey, aspects of the education systems in which they work, and country-based policy measures affecting their profession (Eurydice data). Where possible, the chapters also examine the relation between attitudes, practices, perceptions on one side, and policies and legislation on the other.

Chapter 2 deals with Initial Teacher Education (ITE) and early career support. It examines how ITE is organised, including the component allocated to professional training and in-school placements, the proportion of teachers who have completed ITE, and how far they feel prepared for their work. It also considers the measures for transition to the teaching profession (particularly induction and mentoring), and the proportion of teachers who have benefited from them.

Chapter 3 examines Continuing Professional Development (CPD), discussing the quantitative and qualitative development needs expressed by teachers, as well as how – and how far – they are involved in CPD. It also discusses how their reactions to it are partly conditioned by the way CPD is framed in regulations, and which of its incentives and supporting measures potentially enhance their involvement.

Chapter 4 discusses the transnational mobility of teachers for professional purposes, both during ITE and once they are in service. It considers aspects of mobility such as participation, how it may partly depend on the subject taught, various reasons for going abroad, and international mobility funding schemes.

Finally, Chapter 5 examines factors conditioning the attractiveness of the profession, such as its satisfaction for teachers and their perceptions of how it is valued in society at large. The chapter also describes some of the steps taken by individual countries or education systems to monitor teacher shortages and remedy them.

The report is supplemented by an Appendix in which almost 60 tables contain a wealth of statistical material, mainly based on TALIS 2013 secondary analysis. This Appendix may be consulted on the Eurydice webpage at the following address:

https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:The_Teaching_Profession_in_Europe:_Practices,_Perceptions,_and_Policies.

Data sources and methodology

The core of the present report is based on Eurydice data, for which the reference year is 2013/14, and on the TALIS survey which was conducted in 2013 and published the following year. In addition, Eurostat/UOE data relating to 2013 and extracted in April 2015 has also been used (in Chapter 1) to examine the demographics of the teaching profession in Europe at ISCED level 2.

The scope of the TALIS data in this report is limited to the 22 European countries or regions that took part in the TALIS survey ([4]). Throughout the present document, the survey itself will be referred to as 'TALIS 2013', and the OECD report on the survey (where a bibliographic reference is concerned) as 'OECD (2014)' in most cases followed by a precise page reference.

The TALIS data was collected in accordance with the 1997 International Standard Classification of Education (ISCED 1997), whereas the Eurostat/UOE and Eurydice data have been collected on the basis of ISCED 2011. Further information on the ISCED 1997 and 2011 classifications is contained in the Glossary to the present report.

The content of TALIS 2013 is quantitative and has provided the basis for a secondary analysis focusing on the main of topics of interest. TALIS sought to enhance understanding of the perceptions, attitudes, and views of teachers according to a subset of variables, for the purpose of which teachers and school heads were surveyed via a questionnaire ([5]). The OECD report contains further information on the methodology of the survey and the interpretation of its results, especially concerning the limits of subjectivity, cross-cultural validity, country comparability, and the link between 'statistical net effects' and causality (OECD 2014, p. 29). The statistical note at the end of the present report explains how Eurydice calculations have been based on TALIS data.

In general, the Eurydice data and indicators are qualitative. They contain information on regulations and policy initiatives of the top-level (central) authorities or the authorities responsible for education. Information from the Eurydice Network has been collected via a questionnaire completed by national experts and/or the Eurydice Network national representative. Official documents issued by top-level education authorities are the prime sources of information.

The Eurydice data is confined to public-sector schools with the exception of Belgium, Ireland, and the Netherlands. In these countries government-dependent private institutions (see the Glossary) account for a significant share of school enrolments and follow the same rules as public schools. The TALIS 2013 data used in this report includes responses given by teachers working in public schools, government-dependent private institutions, and private independent institutions. The impact of the latter two is overall small, although it can be more important in some countries and for specific age groups, and therefore affect the reading of statistical analysis. Where this is the case, it has been highlighted.

An effort has been made, where possible, to correlate TALIS 2013 and Eurydice data, in order to explore whether and when teacher responses are attributable to specific regulations and policies, and determine the kind of reaction observable within particular legislative contexts.

The preparation and drafting of the report was coordinated by the Unit A7 Erasmus+: Education and Youth Policy Analysis, a Unit of the Education, Audiovisual and Culture Executive Agency (EACEA).

An 'Acknowledgements' section at the end of the report lists all those who have contributed to it.

([4]) Belgium (Flemish Community), Bulgaria, the Czech Republic, Denmark, Estonia, Spain, France, Croatia, Italy, Cyprus, Latvia, the Netherlands, Poland, Portugal, Romania, Slovakia, Finland, Sweden, the United Kingdom (England), Iceland, Norway, and Serbia.

([5]) Available at http://www.oecd.org/edu/school/Questionnaires%20TALIS%202013.pdf

CHAPTER 1: DEMOGRAPHICS AND WORKING CONDITIONS

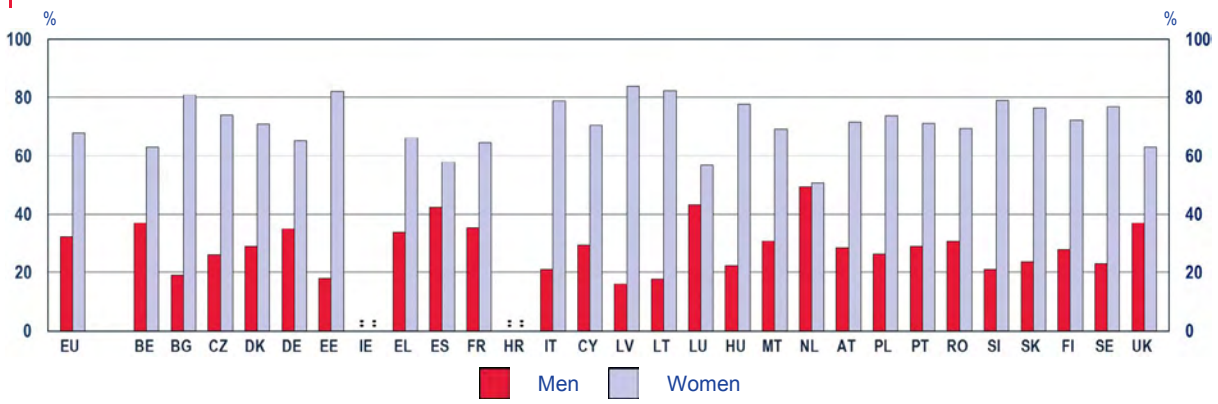
This first chapter discusses contextual aspects of the teaching profession in Europe for lower secondary education (ISCED 2) teachers. After briefly considering Eurostat/UOE demographic data on their gender and age, it then examines Eurydice data on various aspects of their working conditions. As an introductory chapter, it provides some of the background information needed for a clearer insight into the content of the remainder of the report.

1.1. Demographics

1.1.1. Gender

At ISCED level 2 in the EU as a whole, the great majority of teachers are women and less than one third are men, as shown in Figure 1.1. In individual countries, the proportional gender imbalance is highest in Bulgaria, Estonia, Latvia, and Lithuania, in which less than 20 % of teachers are men. Indeed, women comprise the overwhelming majority of teachers in most countries. Only in the Netherlands are the proportions of women and men teachers roughly the same, while in Spain and Luxembourg the percentage point difference between them is 15.5 and 13.6, respectively.

Figure 1.1: Proportion of teachers by gender in lower secondary education (ISCED 2), 2013



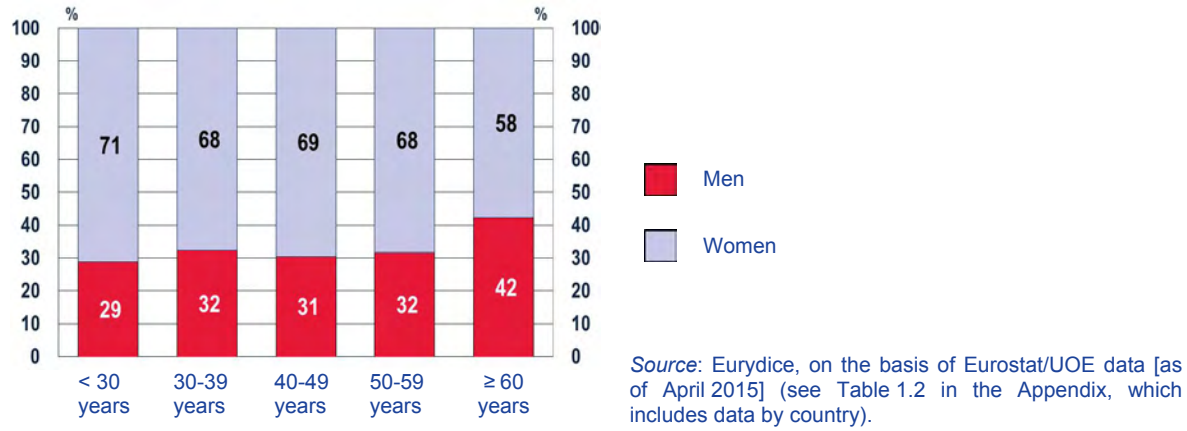
Source: Eurydice, on the basis of Eurostat/UOE data [as of April 2015] (see Table 1.1 in the Appendix).

Country-specific notes

Denmark and **Estonia**: Data includes ISCED level 1.
Ireland: Data is not available separately for ISCED 2.
Hungary: Data includes school management staff.

Gender imbalance in the teaching profession is an issue familiar to policy-makers and researchers, and data suggests that it will persist unless action is taken to attract more men to the profession. Overall, the relatively low proportion of men is common to all teacher age groups although the imbalance is slightly greater among the youngest teachers (see Figure 1.2). The imbalance is noticeably smaller among those aged over 60, possibly as a result of retirement regulations which in some countries have allowed women to retire earlier than men (until recently at least – see Section 1.2.4). The same trend is apparent in individual countries (see Table 1.2 in the Appendix), in all of which the gender imbalance is greater in the age groups under 60 years, with few exceptions among the Baltic and Nordic countries. Even in the Netherlands, the similar proportions of men and women teachers are mainly attributable to the greater number of in-service male teachers aged 50 or over, while among younger teachers the trend is similar to that of other European countries, albeit less marked.

Figure 1.2: Proportion by age group of men and women teachers in lower secondary education (ISCED 2), EU level, 2013



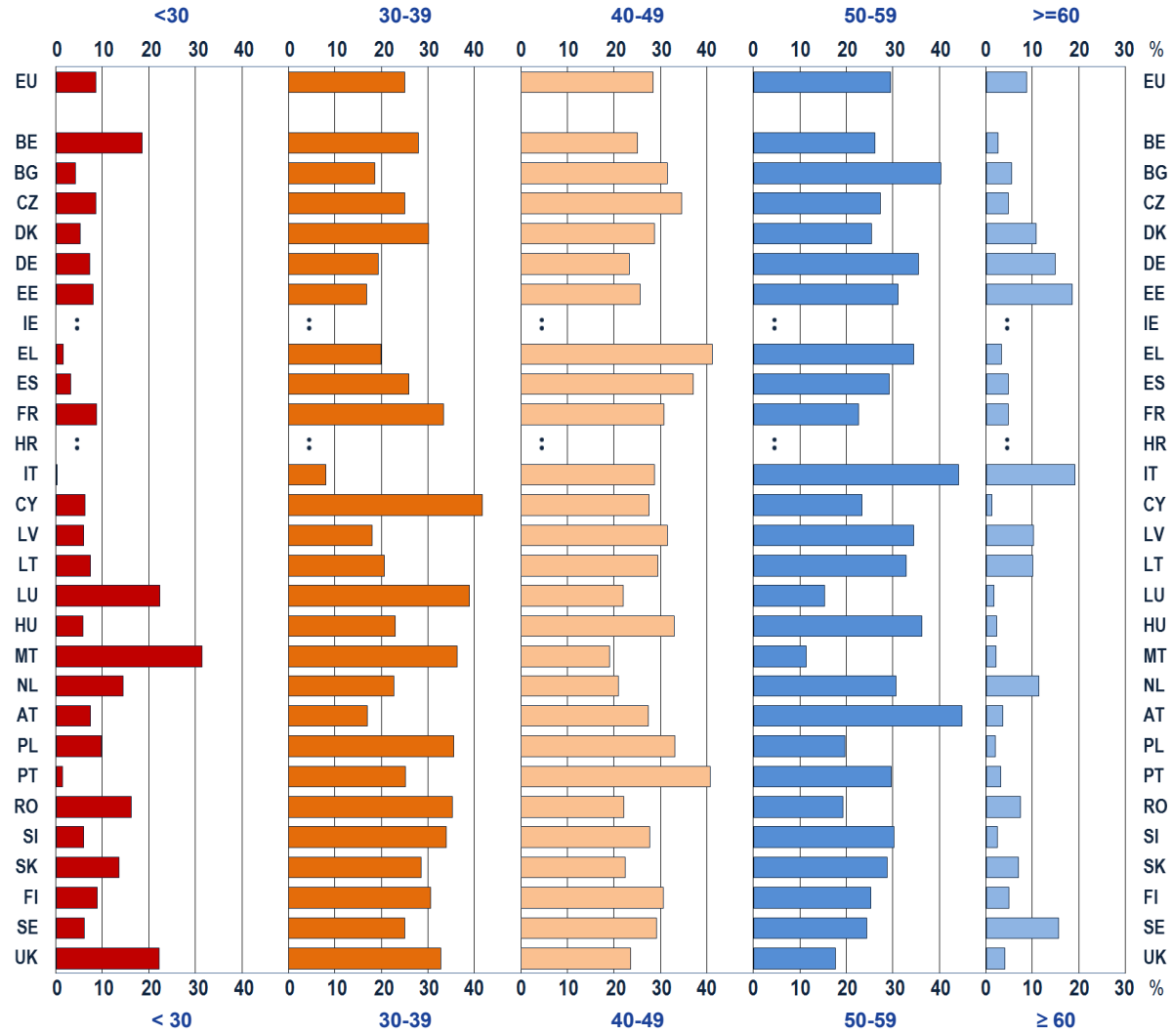
Source: Eurydice, on the basis of Eurostat/UOE data [as of April 2015] (see Table 1.2 in the Appendix, which includes data by country).

1.1.2. Age

Besides gender imbalance, current education policies have to contend with the issue of an ageing teacher population. The challenge is not common to all education systems. In the EU as a whole, 33.6 % of teachers are aged less than 40 (see Figure 1.3). However, in Luxembourg, Malta, Romania, and the United Kingdom, over 50 % of teachers are aged under 40, in that sense comprising the youngest teaching populations in Europe. By contrast, less than 25 % of teachers in Bulgaria, Estonia, Greece, Latvia, and Austria are aged less than 40. Italy – where the corresponding proportion is lower than 10 % – is the country with the 'oldest' teaching population.

At EU level, around 40 % of lower secondary education teachers will be retiring in the next 15 years (see Section 1.2.4). With due consideration of the demographic evolution and the migration flows in each country, education systems might find themselves in shortage of teachers, and will possibly need to enhance the attractiveness of the profession to recruit young candidates.

Figure 1.3: Proportion by age group of teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of Eurostat/UOE data [as of April 2015] (see Table 1.3 in the Appendix).

Country-specific notes

Denmark and **Estonia**: Data includes ISCED level 1.
Ireland: Data is not available separately for ISCED 2.
Hungary: Data includes school management staff.

1.2. Working conditions

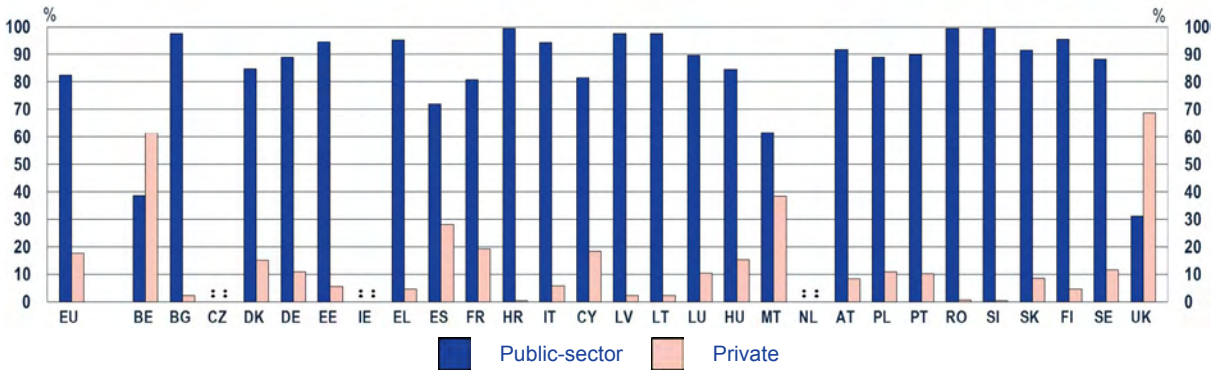
This section contains several indicators relevant to the working conditions of teachers in lower secondary education (ISCED 2) in Europe. The first three examine the sector of employment and employment status of these teachers, while the indicators that follow consider their working hours, salaries, and the age at which they retire. As will be discussed further in Chapter 5, such factors can condition in certain circumstances the attractiveness of the teaching profession and, by the same token, the professional satisfaction of those engaged in it.

1.2.1. Employment

Public-sector and private schools

Figure 1.4 shows that throughout Europe, lower secondary education is overwhelmingly a public-sector responsibility, with the vast majority of teachers employed in public schools. In Belgium, Ireland, and the Netherlands, government-dependent private institutions (see Glossary) account for a significant share of school enrolments and follow the same rules as public schools.

Figure 1.4: Proportion of teachers employed in public-sector and private schools in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of Eurostat/UOE data [as of April 2015] (see Table 1.4 in the Appendix).

Explanatory note

Private schools include government-dependent private institutions and private independent institutions (see Glossary).

Country-specific notes

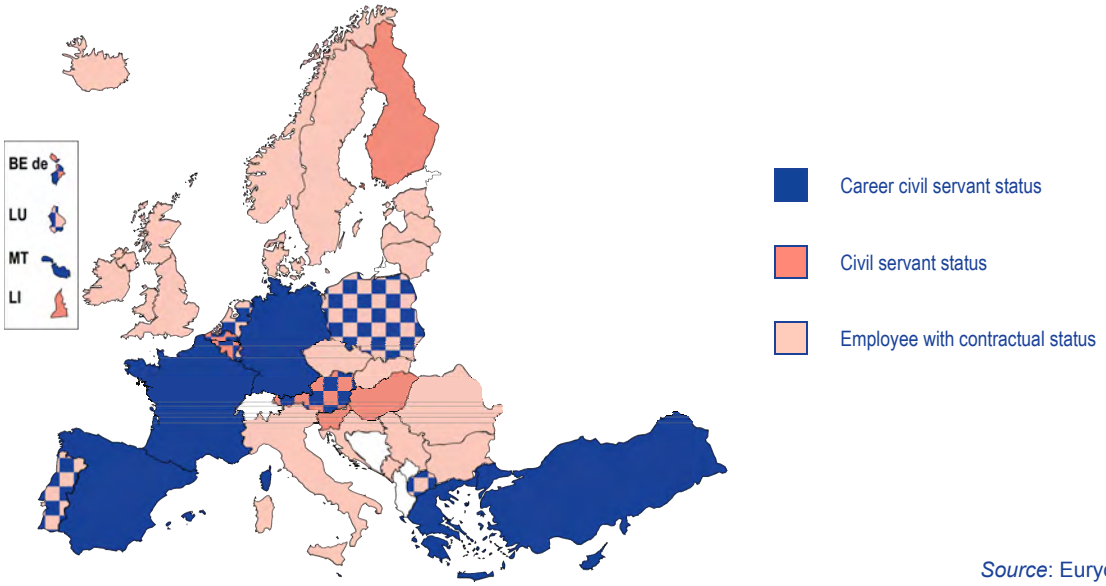
Belgium and **France**: Data on independent private schools is not included.
Denmark and **Estonia**: Data includes ISCED level 1.
Germany: Only data on the total number of private schools is available without distinction between government-dependent and private independent schools.
Ireland: Data is not available separately for ISCED 2.
Hungary: Data includes school management staff.
Netherlands: No distinction is made between private institutions and public-sector schools.
United Kingdom: The significant proportion of government-dependent private institutions in England (called academies) affects the data illustrated for the UK as a whole. In Scotland, Wales, and Northern Ireland the majority of teachers are employed in public schools.

The cohort of teachers responding to the TALIS 2013 survey represent both public and private schools (as far as the latter both government-dependent and independent) in shares close to those shown in the above Figure (see Table 1.5 in the Appendix). However, further analysis shows that in some countries the number of teachers working in private institutions is particularly high in the age group below 30 (see Table 1.6 in the Appendix). This element should be taken into account when considering measures affecting this specific age group, as legislation governing the functioning of private schools (both government-dependent and independent) can in some countries differ from legislation governing the public-sector schools.

Employment status

The employment status of teachers working in the public sector of lower secondary education (ISCED 2) is of three kinds, namely 'contractual status', 'civil servant status', and 'career civil servant status' (see Glossary). Figure 1.5 illustrates the employment status of fully qualified teachers in the public sector. Other groups such as trainee teachers, replacement teachers, and teachers undergoing their probationary period are not shown.

Figure 1.5: Teacher employment status in public-sector general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

Country-specific notes

Spain: Teachers of religion have contractual status.
Austria: As of September 2015, all newly employed teachers will have civil servant status.

In the great majority of countries, the employment status of all teachers (ISCED 2) is the same. In 20 education systems, teachers are contracted as employees with contractual status, while in seven they are career civil servants. In Finland, Slovenia, Slovakia, and Liechtenstein, teachers hold a civil servant status. On the other hand, in Luxembourg, the Netherlands, Poland, Portugal, and the former Yugoslav Republic of Macedonia, the career civil servants and contractual statuses coexist. In either case, the status is dependent on the type of institution that employs teachers, or their position in the promotional or school hierarchy. Belgium and Austria are the only countries in which civil servant status and career civil servant status coexist.

Moreover, in some countries, the employment conditions and contractual status can differ.

Teachers in **Belgium** who work in schools administered by one of the Communities are employed as civil servants, whereas those working in the government-dependent private institutions are employed in accordance with general employment legislation, but have civil servant status nevertheless.

Public-sector teachers in the **Netherlands** are career civil servants, whereas those who teach in government-dependent private schools sign a (private law) contract with the legal entity employing them. However, staff in both groups have the same working conditions as both are subject to collective agreements.

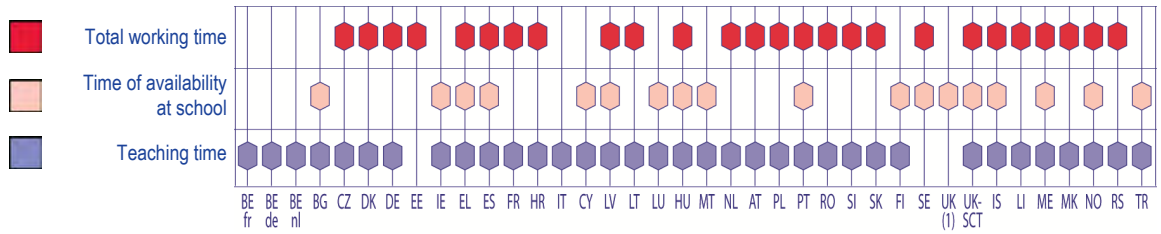
In **Austria**, teachers employed as civil servants by the federal or provincial governments are bound by legislation concerning contractual relations.

Teachers in **Iceland** and **Serbia** who are employed by the local or school authorities on a contractual basis in accordance with general employment legislation are subject to central agreements on salaries and conditions.

1.2.2. Working hours

Besides teaching as such, teachers have to perform many other duties including tasks concerned with administration, organisation and planning, student assessment, and relations with parents, students, and other stakeholders. These multiple facets of their work are not always reflected – for whatever reason – in their contracts, and based rather on a tacit understanding of what is expected of teachers as part and parcel of their activity. This section considers the contractual obligations of full-time teachers in Europe in terms of their teaching time, availability at school, and their total working time. Figure 1.6 shows that these three components of their workload are not always centrally regulated. Teaching time is contractually specified in 35 education systems. The great majority of countries also centrally regulate the total working time of teachers, which averages 39 hours a week. In 18 education systems, their obligatory time of availability at school is contractually specified either in addition to or instead of the other two components. Nine education systems refer specifically to all three components, while the remainder cite them in different combinations.

Figure 1.6: Components in the official definition of the working time of teachers in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

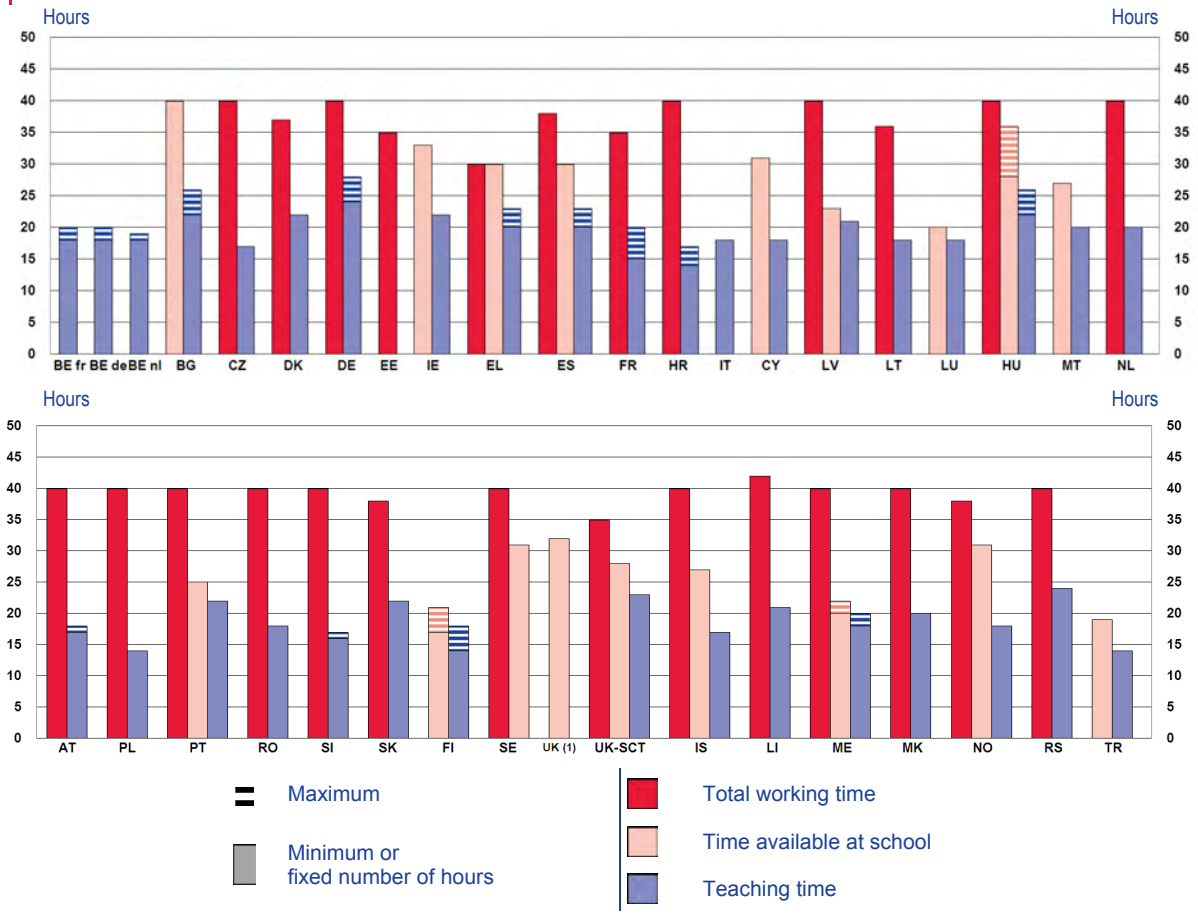
UK (1) = UK-ENG/WLS/NIR

For a more detailed focus on country differences, Figure 1.7 shows the contractual requirements by country and by workload component in hours per week.

Minimum and maximum weekly workloads shown in Figure 1.7 reflect differences within the country concerned. In Belgium, each school can fix its own teaching requirement between the centrally established minima and maxima. In Bulgaria, Croatia, Slovenia, Finland, and Montenegro, time available at school and/or teaching time vary according to the subject taught. In Austria, teaching time depends on the type of school (*Hauptschulen, Neue Mittelschulen,* or *Allgemeinbildenden Höheren Schulen)*. The teaching hours shown for Germany depend on the *Land* and the type of school concerned. In Hungary, teaching time and availability at school depend on the length of the lessons and the position fulfilled. In France, teaching time depends on the subject taught and the status of the teacher. In Greece, teaching requirements vary according to the years of experience of the teacher. Finally, while the minimum amount of teaching time in Spain is regulated centrally, the maximum amount is decided by each Autonomous Community.

In most countries, the employment contracts of teachers specify the number of hours they are required to teach. The weekly total varies considerably among countries, ranging from a minimum of 14 hours in Croatia, Poland, Finland, and Turkey, to a maximum of 28 hours in Germany. On average, teaching time constitutes 44 % of a teacher's total working time, with marked deviations of 77 % in Greece, 64 % in the United Kingdom (Scotland), and 60 % in Serbia. Only five education systems – Estonia, Sweden, and the United Kingdom (England, Wales, and Northern Ireland) – do not contractually specify a number of teaching hours, while two (Belgium and Italy) regulate only teaching time. In Estonia, a teaching time approach was abandoned and replaced by a total working time requirement in September 2013.

Figure 1.7: Official definitions of the weekly workload (in hours) of full-time teachers in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

		BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU	HU
A	min.					40	37	40	35		30	38	35	40			40	36		40
	max.					40	37	40	35		30	38	35	40			40	36		40
B	min.				40					33	30	30				31	23		20	28
	max.				40					33	30	30				31	23		20	36
C	min.	18	18	18	22	17	22	24		22	20	20	15	14	18	18	21	18	18	22
	max.	20	20	19	26	17	22	28		22	23	23	20	17	18	18	21	18	18	26

		MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK (1)	UK SCT	IS	LI	ME	MK	NO	RS	TR
A	min.		40	40	40	40	40	40	38		40		35	40	42	40	40	38	40	
	max.		40	40	40	40	40	40	38		40		35	40	42	40	40	38	40	
B	min.	27				25				17	31	32	28	27		20		31		19
	max.	27				25				21	31	32	28	27		22		31		19
C	min.	20	20	17	14	22	18	16	22	14			23	17	21	18	20	18	24	14
	max.	20	20	18	14	22	18	17	22	18			23	17	21	20	20	18	24	14

Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

A Overall working hours **B** Hours of availability at school **C** Teaching hours

Explanatory note

The Figure shows the situation of a teacher working full-time who does not have other duties (e.g. management tasks) in the school. Reduced timetable requirements for teachers who are not yet qualified or who are newly qualified are not shown. In the case of countries in which the obligations of teachers are determined on an annual basis, an average weekly number of hours has been calculated. Where teaching requirements are expressed in terms of lessons, weekly hours are obtained by multiplying the number of weekly lessons by the number of minutes they last, and dividing the result by 60. Figures have been rounded up to the nearest whole hour.

Country-specific notes

Italy: Teacher contracts state that 80 hours a year of time available at school are specifically for collegial activities and meetings with staff and parents.
Malta: Since September 2014, the maximum teaching hours are fixed at 17 hours and 20 minutes comprising 26 lessons lasting 40 minutes each.
Netherlands: The number of teaching hours is agreed by the social partners in the collective agreement for teachers and is expressed in terms of number of annual teaching hours (maximum of 750 hours per year).
Austria: All teachers who qualify after September 2020 will have teaching assignments of 20 hours a week. Teachers qualifying between September 2015 and September 2020 will be able to choose between the existing regulation and the new one.
Poland: Teachers are required to be available in school for two hours in addition to their teaching time. The legislation does not specify a total number of hours to be available at school.
Slovenia: The head teacher can increase teachers' teaching time up to 5 hours per week, or reduce it by 3 hours per week.

The absence of any centrally legislated requirement regarding a minimum amount of teaching time gives schools greater freedom to organise their own timetable for teachers. This might – theoretically at least – lead to wide variations in the teaching time requirements of schools within a given country, or to a given average weekly amount of teaching time becoming a regional or local norm.

As regards total working time and time of availability at school respectively, three scenarios are possible. A country's regulations can specify a) requirements pertaining to both (as is the case in 10 education systems); b) requirements applicable to one or the other (the situation in the majority of countries); or c) no requirements with regard to either (as in Belgium and Italy). Among those countries that regulate both total working time and obligatory availability at school, the gap between the two (expressed in hours) varies greatly. Where this gap is big, or where there is no regulation on availability time at school (as in 20 education systems), teachers can more easily perform their non-teaching activities wherever and whenever they wish (e.g. at home in the evening). On the other hand, big gaps between the amount of *teaching time* and the time of availability at school (such as the 18-hour gap in Bulgaria) imply that teachers spend long periods carrying out non-teaching duties on school premises.

Greece is the only country in which the prescribed total working time of teachers is the same as the time they should spend at school. This seems to imply that all non-teaching activities are carried out on school premises. In countries with no regulations on total working time, teachers are required to be available at school for a minimum amount of time and/or to teach a prescribed number of hours, in order to earn a full-time salary. For example, Bulgaria does not regulate the total working time of teachers but does requires them to be available at school for 40 hours a week, which is longer than in any other European country.

1.2.3. Salaries

Teacher salaries have been widely discussed in the national debate during the current financial crisis. As policy-makers are under pressure to reduce government spending, particularly on public payrolls, big differences in teacher salaries are apparent from one country to the next. In October 2014, Eurydice published a report on the salaries and allowances paid to teachers and school heads in Europe at ISCED levels 0, 1, 2 and 3 (European Commission/EACEA/Eurydice, 2014b). Besides national data sheets, the report offered a comparative analysis of salaries in various countries, citing for this purpose the ratios of statutory annual salaries to Gross Domestic Product (GDP) per capita. These ratios are given in Figure 1.8. The minimum and maximum values shown in the Figure represent the lower and higher end of the salary scale of teachers on the basis of their length of service.

Figure 1.8: Minimum and maximum basic gross annual statutory salary of full-time fully qualified teachers in general lower secondary education (ISCED 2), as a percentage of GDP per capita, 2013/14

		BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES (a)	ES (b)	FR	HR	IT	CY	LV	LT	LU	HU	MT
ISCED 2	Min	87.9	88.7	89.3	:	62.6	94.0	140.2	67.1	78.1	75.3	139.4	148.8	87.6	85.2	97.1	125.7	39.7	32.3	95.7	63.2	107.4
	Max	151.5	147.4	154.8	:	77.4	116.1	184.7	77.3	166.7	142.3	196.8	206.2	152.3	139.3	145.4	305.8	:	59.4	166.4	131.5	141.2

		NL	AT (a)	AT (b)	PL	PT	RO	SI	SK	FI	SE	UK (1)	UK-NIR	UK-SCT	IS	LI (a)	LI (b)	ME	MK	NO (a)	NO (b)	TR
ISCED 2	Min	95.3	80.5	88.6	60.8	135.8	47.1	98.3	50.6	96.2	67.0	84.3	84.3	100.4	79.6	70.4	65.1	178.7	:	63.7	66.6	144.8
	Max	196.3	154.1	185.8	102.6	260.5	125.1	158.1	68.5	125.1	93.4	143.5	143,5	133.6	99.4	114.3	105.6	283.7	:	-	-	169.1

Source: Eurydice. UK (1) = UK-ENG/WLS

Explanatory note

The **gross annual statutory salary** is the amount paid by the employer in a year, including the 13th month and holiday pay (where applicable) but excluding the employers' social security and pension contributions. This salary does not include other salary allowances or financial benefits (related, for example, to further qualifications, merit, overtime, additional responsibilities, geographical location, the obligation to teach in challenging circumstances, or accommodation, health or travel costs).

In order to compare public expenditure on teacher remuneration across countries, one of the most commonly used indicators is the relationship of the minimum or maximum statutory salaries to the per capita Gross Domestic Product (GDP), an indicator of the standard of living in a country. This relationship can be presented either in percentage (ratio between salary and GDP per capita) or in absolute terms. The above Figure 1.8 presents data using the first option. The second option, used in some sections of the report 'Teachers' and School Heads' Salaries and Allowances in Europe' (European Commission/EACEA/ Eurydice, 2014b), helps to clearly identify the order of magnitude of the two variables, which is not apparent under the first.

When comparing teachers' salaries to per capita GDP, it is necessary to consider that a positive change in this indicator does not necessarily mean an increase in teachers' real purchasing power. This is the case in countries where the per capita GDP decreased due to the budgetary and financial crisis, while statutory salaries remained unchanged or fell by a lower rate than the per capita GDP.

The reference calendar year for GDP per capita is 2013. Source: Eurostat [data as of May 2014: nama_gdp_c]. The reference period for salaries is the 2013/14 school year or the 2014 calendar year. Exchange rates, source: Eurostat (data as of May 2014: ert_bil_eur_m).

Country-specific notes

Belgium: National GDP per capita is the criterion (and not the GDP per capita of each Community).
Czech Republic: Statutory salaries are based on salary scales 11 and 12.
Denmark: The earnings-related pension is included.
Ireland: There are three different pay scales for teachers depending on the time of their first appointment. The data reflects the pay for teachers appointed between 1 January 2011 and 1 February 2012.
Spain: The total amounts correspond to average salaries in public education, calculated as a weighted average of the salaries in the different Autonomous Communities. (a) Teachers who do not have a Catedráticos status; (b) Teachers with Catedráticos status.
France: Minimum and maximum salaries refer to the statutory wage of a *Professeur certifié* and include a bonus for tutoring and extra teaching time.
Cyprus: Since 2013, due to the financial crisis, restrictions and deductions to the salaries of teachers have been introduced. As a result, the minimum and maximum annual basic gross statutory salary of full-time teachers in ISCED 2, as a percentage of per capita GDP is now 113.6 % and 276.41 %, respectively.
Latvia: There are no regulations on maximum salaries.
Netherlands: Schools are free to decide in which salary scale teachers start their career.
Austria: **(a)** *Hauptschule and Neue Mittelschule* teachers; **(b)** *Allgemeinbildende Höhere Schule* teachers.
Poland: The minimum and maximum gross annual statutory salaries shown are those for teachers with the basic minimum qualifications. However, approximately 90 % of teachers have higher levels of qualification and receive higher remuneration.
Liechtenstein: The maximum gross annual statutory salary is the minimum salary plus all age increments, as the agreements do not define a maximum statutory salary. **(a)** *Gymnasium* teachers; **(b)** *Oberschule/Realschule* teachers.
Norway: **(a)** with 4 years of initial training; **(b)** with 5 years of initial training. Maximum salary not applicable.

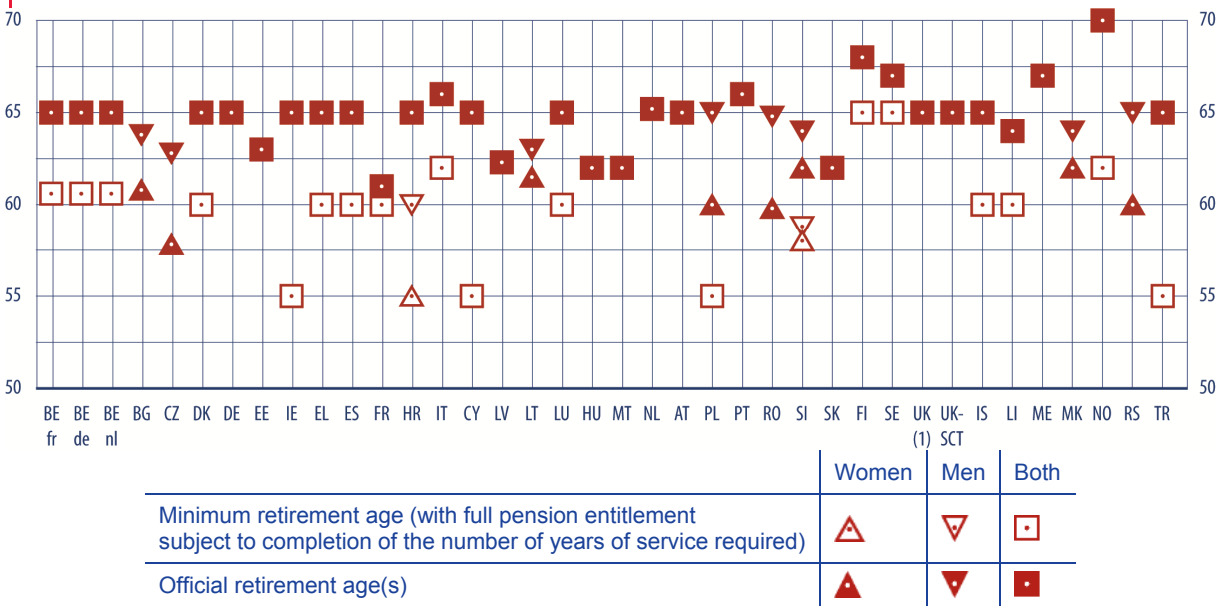
As shown in Figure 1.8, with regard to the GDP-related ratios, the minimum annual statutory salary is around 88 % and the maximum salary 305 % of GDP per capita. In the majority of education systems (30), the minimum salary is below the country's GDP per capita, and in seven of them the maximum salary is below the country's GDP per capita. Lithuania, Latvia, and Romania are the three countries with the lowest minimum salary to GDP ratio, in each case below 50 %. The highest minimum salary to GDP ratios are reported in Montenegro (179 %), Spain (139 % for *Catedráticos* teachers), Turkey (145 %), and Germany (140 %), although for the latter this is not applicable to all *Länder*. With regard to maximum salary levels, Lithuania and Slovakia exhibit the lowest ratios to GDP, below 70 %. Countries with the highest ratios are Cyprus, Portugal, and Montenegro, all above 250 %. Education systems with the lowest increase in salary are Estonia (10 percentage points) and the Czech Republic

(15 percentage points). Countries with the highest difference between minimum and maximum annual salary are Cyprus (180 percentage points), Portugal (125 percentage points), and Montenegro (105 percentage points). Further information on the length of service required to obtain the maximum salary is included in Chapter 5.

1.2.4. Retirement age

In the majority of European education systems, teachers working at ISCED level 2 can officially retire at the age of 65 (see Figure 1.9). In Denmark, Estonia, Greece, Spain, Latvia, Luxembourg, the Netherlands, Slovakia, Finland, Sweden, and the United Kingdom, teachers can continue to work beyond this age limit. Among the 12 countries in which the official retirement age is lower for both women and men, France has the lowest age (61) for both. By contrast, Norway has the highest (70) for both.

Figure 1.9: Retirement age of teachers in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Number of years of service required for full pension entitlement at the minimum retirement age

BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR
34y 10m	34y 10m	34y 10m	(-)	30y	(-)	40y	(-)	35y	37y	35y	40y 4m	30y (women), 35y (men)
IT		**CY**	**LV**	**LT**	**LU**	**HU**	**MT**	**NL**	**AT**	**PL**	**PT**	**RO**
41y 6m (women) 42y 6m (men)		33y 3m	15y	30y	35y	40y (women)	35y	(-)	40y	30y	36y	14y 4m
SI	**SK**	**FI**	**SE**	**UK (1)**	**UK-SCT**	**IS**	**LI**	**ME**	**MK**	**NO**	**RS**	**TR**
38y 8m	15y	(-)	(-)	(-)	(-)	35y	25y	15y	(-)	30y	35y (women), 40y (men)	33y 3m

y = year(s) m = month(s)

Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

Explanatory note

The **official retirement age** sets the limit at which teachers stop working. In certain countries and in special circumstances, they may continue to work beyond this age limit.

The **minimum retirement age** with full pension entitlement offers teachers the possibility of retiring before they reach the official retirement age. Their full pension entitlement is subject to completion of the number of years of service required.

The **minimum number of years of service** denotes the minimum number of years that teachers need to work before they are entitled to a full pension, in addition to having reached the minimum retirement age.

The minimum retirement age(s) is (are) only indicated if it (they) differ(s) from the official retirement age(s).

Country-specific notes

Belgium: The minimum retirement age will be gradually increased up to 62 years in 2016. The minimum number of years of service will also be increased up to 38 years and 6 months in 2018. The retirement age shown in Figure 1.9 applies only to teachers with permanent contracts.
Czech Republic: The ages indicated in Figure 1.9 relate to the year 2014. The official retirement age differs according to the year of birth and gradually increases every year by 2 months for men and 4 months for women. In 2014, the official retirement age for women ranged from 57 years and 8 months to 61 years and 8 months. The official retirement age for women depends on the number of children raised by them. The minimum number of years of service has been increased gradually every year. By 2019, the minimum number of years of service required for full pension entitlement will be fixed permanently at 35.
Denmark: The official retirement age depends on the date of birth. For people born after 31 December 1962, the official retirement age will be set by the Ministry of Children, Gender Equality, Integration and Social Affairs and calculated on the basis of the life expectancy provided by Statistics Denmark's records.
Germany: The official retirement age has been raised regularly since 2012.
Estonia: Women born between 1944 and 1952 have been entitled to a retirement pension before reaching the age of 63 (in the period between the ages of 58 years and 6 months, and 62 years and 6 months).
Ireland: The minimum number of years of service may be less than 35 to take account of the duration of a teacher's training course before entering the profession.
Greece: A teacher can work beyond the official retirement age of 65 but not beyond the age of 67.
Spain: Teachers can voluntarily work up to the age of 70. The new official requirements for the retirement age will be progressively implemented over a period of 15 years to reach the age of 67 in 2027. Between 2013 and 2027, the minimum number of years of service will also be gradually increased from 35 years to 38 years and 6 months. The minimum retirement age and the minimum number of years specified in the Figure 1.9 apply only to teachers who became civil servants before 1 January 2011, and who belong to the special social security system for civil servants (passive classes).
France: The official retirement age depends on the date of birth. It has been raised progressively since the reform of November 2010, as a result of which no teacher born after 1 January 1955 will be allowed to retire until the age of 62.
Italy: The number of years specified in Figure 1.9 refers to the number of years of contribution to the national pension scheme, which can exceed the number of years of service.
Latvia: A regular annual increase of three months in the official retirement age since 2014 will continue until the latter reaches 65 in 2025.
Lithuania: By 2026, the official retirement age will be 65 for men and women.
Luxembourg: Teachers can work beyond the official retirement age of 65, but not beyond the age of 68.
Hungary: The official retirement age is being raised gradually from 62 to 65. Since 2011, women who have completed 40 years of service can retire regardless of their age.
Malta: The official retirement age is being gradually increased until it reaches 65 for both men and women in 2027.
Netherlands: The official retirement age is being raised until it reaches 66 in 2018 and 67 in 2021.
Poland: From 2015, the minimum retirement age is being increased every two years. The number of years of service required for full pension entitlement is 30, of which 20 have to be as a teacher. The official retirement age is being increased until it reaches 67 for men and women in 2020 and 2040 respectively.
Slovenia: The official retirement age is being gradually increased to 65, while the minimum retirement age is being raised to 60 and the minimum number of years of service to 40.
Finland: The official retirement age is 63 but retirement at this age does not result in full pension entitlement. For those born after 1959, this entitlement is secured through retirement at 65. For those born before 1959, the retirement age resulting in full pension rights depends on the years of public service.
Sweden: There is a flexible retirement age of between 61 and 67. Retirement at 61 is a universal right but does not grant full pension entitlement.While all teachers who retire at 65 are entitled to a full pension, those who work for longer up to a maximum age of 67 have an even higher pension entitlement.
United Kingdom: The normal pension age for teachers is 60 for those who entered the profession before 1 January 2007 (1 April 2007 in Scotland), and 65 for those who entered after that date.
Serbia: The official retirement age for women is being gradually increased until it reaches 65 in 2032.

In almost half of the countries and regions surveyed, teachers can retire on a full pension before they reach official retirement age, provided they have completed the required number of years of service. In general, the minimum age at which a teacher can retire is close to 60, while differences between official and minimum retirement ages range from one year in France, to 10 years in Ireland, Croatia (in the case of women), Cyprus, Poland (in the case of men), and Turkey.

There has been a general tendency to increase either the minimum number of years of service or the minimum retirement age (or both), or to abolish the latter so that the official retirement age is the only reference point. Moreover, in 15 education systems (the Czech Republic, Denmark, Germany, Spain, France, Italy, Latvia, Lithuania, Hungary, Malta, the Netherlands, Poland, Portugal, Slovenia, and Serbia), the official retirement age has been increasing in recent years.

As is clear from Figure 1.9, the criteria governing the retirement age for men and women are the same in the majority of countries, although in some countries they differ, particularly in Central and Eastern Europe. At present, women teachers in these countries may secure their pension earlier than men, with differences in the ages concerned of between one-and-a-half and five years. But there has also been a tendency to lessen such differences or abolish them altogether.

CHAPTER 2: INITIAL TEACHER EDUCATION AND TRANSITION TO THE TEACHING PROFESSION

In its Communication, *Rethinking Education* ([1]), the European Commission underlines the importance of initial teacher education (ITE) and invites countries to review its effectiveness and quality for teaching purposes, and boost induction into the teaching profession. Acknowledging that 'it is not uncommon for new teachers to leave the profession prematurely, a phenomenon which can result in a significant loss to the individuals concerned and systems as a whole', the Council of the European Union considers teacher education to be an integral part of the broader policy objective of enhancing the attractiveness and quality of the profession, which among other things calls for adequate selection, recruitment and retention policies, effective ITE and early career support ([2]). The quality of ITE is crucial to the development of excellence in teaching. Ideally, it should provide for a balanced and consistent approach to theoretical knowledge of the school subject concerned, skilful teaching of the subject, and first-hand teaching experience. ITE graduates should be able to put theory into practice and constantly reconsider how they teach.

This chapter consists of two main sections, the first focusing on certain characteristics of ITE for lower secondary education (ISCED 2), and the second on induction programmes and the provision of mentoring for first-time teachers in lower secondary education.

The first section discusses regulations concerning the level of qualification provided by ITE, its minimum length, and the time it allocates to professional training, including in-school placements. The section also shows the distribution of teachers with respect to the highest educational level they have reached. It then goes on to examine the proportion of teachers who have completed ITE, and whether it included the three key components comprising academic knowledge of their subject, the teaching approaches of it, and the opportunity to gain real classroom experience. It considers how far teachers feel prepared for their work as a result of having (or not having) completed ITE and, in the case of those who have done so, having (or not having) been trained in terms of the three foregoing components.

The second section focuses on the transition to the teaching profession. It examines the existence of central regulations on induction programmes for newly fully qualified teachers ([3]), their participation in such programmes, the main factors affecting their participation, and the types of activity involved. Information on mentoring is also provided in terms of, first, those mentored (regulations, participation, and predictive factors associated with the provision of mentoring) and, secondly, of the teachers who mentor others (predictive factors in the appointment of mentors, and their preparation or training) ([4]).

([1]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 20 November 2012, on Rethinking Education: Investing in skills for better socio-economic outcomes, COM/2012/0669 final.

([2]) Council conclusions of 20 May 2014 on effective teacher education, OJ C 183, 14.06.2014, p. 22.

([3]) Further information on induction programmes, including those for experienced teachers at a new school, is contained in OECD (2014), pp. 88-93.

([4]) The OECD (2014, pp. 93-97) provides further information on mentoring but more in terms of continuing professional development and the targeting of all teachers.

2.1. Initial teacher education

2.1.1. Organisation and levels of qualification

Regulations

Figure 2.1 shows the minimum requirement in central regulations concerning ITE for future teachers in the public sector. The Master's level of qualification (ISCED 7) is the minimum level of ITE for work in general lower secondary education in 17 countries. This is the case in the Czech Republic, Germany, Estonia, Spain, France, Croatia, Italy, Luxembourg, Hungary, Poland, Portugal, Slovenia, Slovakia, Finland, Sweden, Iceland, and Serbia. In 15 countries, only the Bachelor's level (ISCED 6) is required. These countries are Belgium (French and Flemish Communities), Bulgaria, Denmark, Ireland, Greece, Cyprus, Latvia, Lithuania, Malta, Romania, the United Kingdom, Montenegro, the former Yugoslav Republic of Macedonia, Norway, and Turkey.

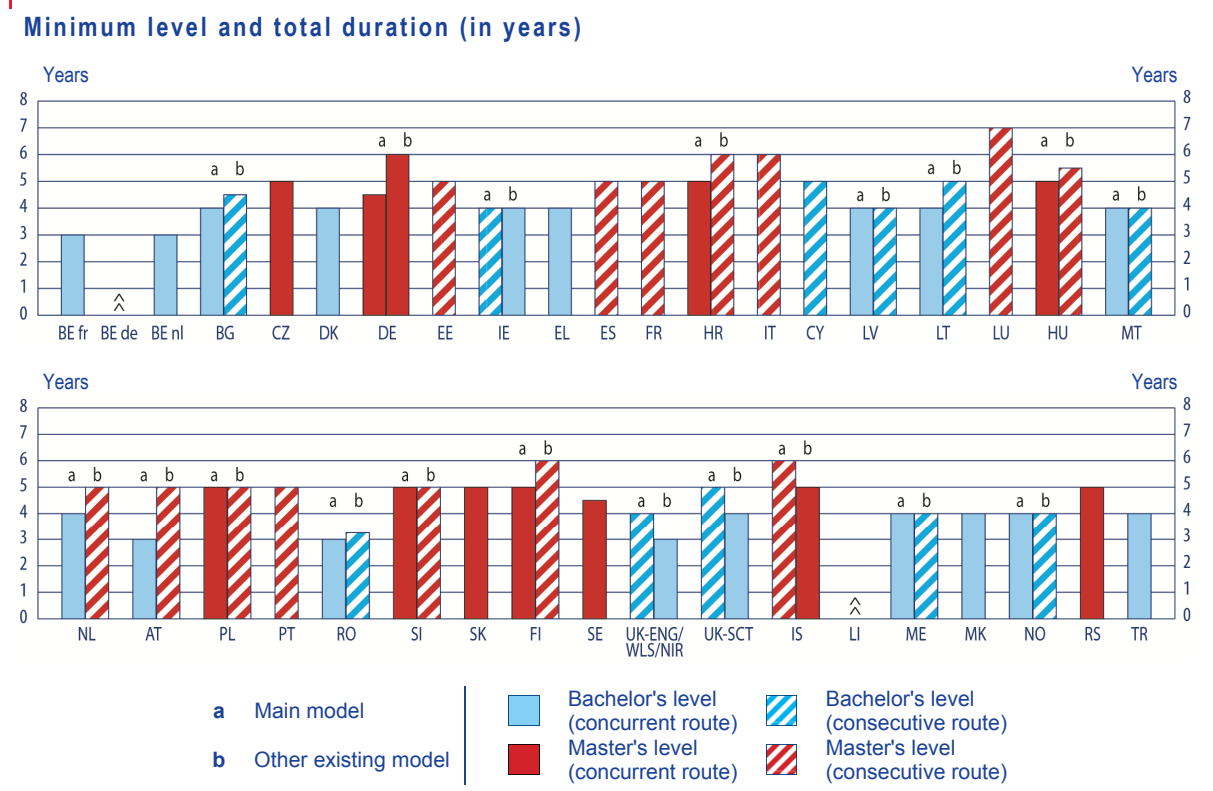
In the Netherlands and Austria, teachers may either qualify at Bachelor's or Master's level but with different professional options. In the Netherlands, the minimum qualification obtained on completion of ITE has an impact on the level of education where the teacher may work. The qualification at Bachelor's level is sufficient to teach in lower secondary education (Grade 2); graduates at Master's level (Grade 1) may in addition teach in upper secondary education. In Austria, the minimum level of qualification awarded in ITE depends on the type of school in which teachers will work. A Master's degree is required to teach in 'secondary academic education' (in the *Allgemeinbildende höhere Schule*), whereas only a Bachelor's degree is needed for work in 'general secondary education' (in *Neue Mittelschulen* or *Hauptschulen*).

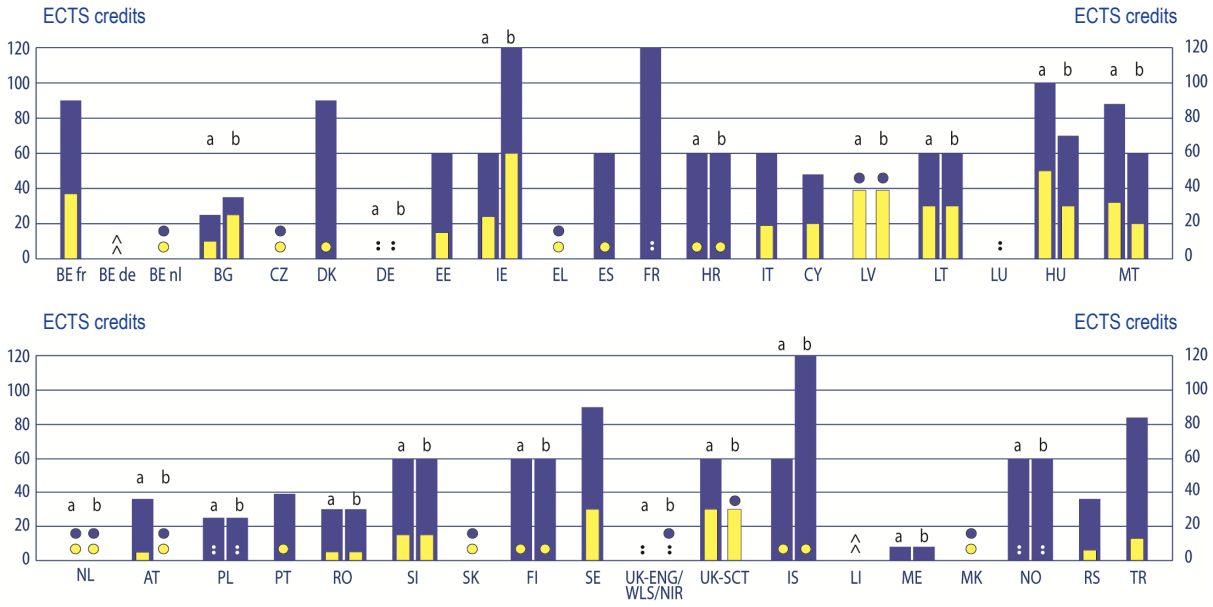
In almost half of the countries, two different ITE models offering the same professional options coexist: trainee teachers may follow a professional route from the start (the so-called ‘concurrent’ model of ITE), or begin with academic study of their subject before specialising as teachers (the ‘consecutive’ model). ITE may last longer for those who prefer to qualify as teachers after a first standard academic (non-teaching) degree (as in Bulgaria, Croatia, Lithuania, Hungary, Romania, Finland, the United Kingdom, and Iceland). However, the concurrent and consecutive routes through ITE last the same length of time in Ireland, Latvia, Malta, Poland, Slovenia, Montenegro, and Norway.

The minimum total duration of ITE for work in general lower secondary education is usually between four and six years. It may last no more than three years in six education systems, namely those of Belgium (French and Flemish Communities), Romania (in the concurrent model), and the United Kingdom (in the concurrent models of England, Wales, and Northern Ireland). The minimum qualification for these training routes is at Bachelor's level. By contrast, the ITE consecutive model lasts seven years in Luxembourg.

Besides knowledge of their subject, trainee teachers need to acquire professional skills. Their professional training includes both theoretical studies (the educational theory of teaching, psychology, etc.) and practical training in schools – the observation of teaching in practice and, possibly, some time spent assuming direct responsibility for it. Most countries specify a minimum period for professional training. The average duration is 60 ECTS credits, corresponding to around a year of full-time training. In Ireland (in the concurrent model), France, and Iceland (the concurrent model), professional training lasts for twice as long. It is less than the equivalent of 40 ECTS credits in Bulgaria, Austria (the concurrent model), Poland, Portugal, Romania, Montenegro, and Serbia.

Figure 2.1: Minimum level and total duration of ITE for work in lower secondary education (ISCED 2), and minimum length of professional training (including in-school placements), according to central regulations, 2013/14





Source: Eurydice.

ECTS	BE fr	BE de	BE nl	BG		CZ	DK	DE		EE	IE		EL	ES	FR	HR		IT	CY
Route	-	-	-	a	b	-	-	a	b	-	a	b	-	-	-	a	b	-	-
A	180	^^	180	240	:	300	240	:	:	300	240	240	240	300	300	300	360	360	288
B	90	^^	o	25	35	o	90	:	:	60	60	120	o	60	120	60	60	60	48
C	37	^^	o	10	25	o	o	:	:	15	24	60	o	o	:	o	o	19	20

ECTS	LV		LT		LU	HU		MT		NL		AT		PL		PT	RO		SI	
Route	a	b	a	b	-	a	b	a	b	a	b	a	b	a	b	-	a	b	a	b
A	240	240	240	300	:	300	330	240	240	240	300	180	300	300	300	300	210	210	300	300
B	o	o	60	60	:	100	70	88	60	o	o	36	o	25	25	39	30	30	60	60
C	39	39	30	30	:	50	30	32	20	o	o	4.8	o	:	:	o	5	5	15	15

ECTS	SK	FI		SE	UK (1)		UK-SCT		IS		LI	ME		MK	NO		RS	TR
Route	a	a	b	-	a	b	a	b	a	b	-	a	b	-	a	b	-	-
A	300	300	360	270	:	180	300	240	360	300	^^	240	240	240	240	240	300	240
B	o	60	60	90	:	o	60	o	60	120	^^	8	8	o	60	60	36	84
C	o	o	o	30	:	:	30	30	o	o	^^	0	0	o	:	:	6	13

A Total duration **B** Professional training **C** In-school placements ^^ No teacher education in the Community/country

Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

Explanatory note

Concurrent model: The theoretical and practical professional training is given at the same time as general education. The upper secondary school leaving certificate is the qualification required to undertake training in accordance with this model as well as, in some cases, a certificate of aptitude for tertiary education. Other selection procedures for admission may also be applied.

Consecutive model: The theoretical and practical professional training follows general education. In this model, students who have undertaken higher education in a particular field, move on to professional training in a separate phase.

Professional training: Provides prospective teachers with both the theoretical and practical skills needed to be a teacher. It does not include the academic knowledge of the subject(s) to be taught. In addition to courses in psychology and teaching methods and methodology, professional training includes in-school placements.

In-school placement: Placement (remunerated or not) in a real working environment lasting typically no more than a few weeks. It is supervised by a teacher, with periodic assessment by teachers at the training institution. These placements are an integral part of professional training.

Data collected on the basis of ISCED 2011 (see the Glossary).

Teachers qualifying from emergency training systems in cases of teacher shortage are not considered in the Figure.

Country-specific notes

Belgium (BE de): No teacher education is organised within the Community. Most teachers are trained in the French Community of Belgium. The minimum requirement for recruitment is a Bachelor's degree.
Belgium (BE nl): According to the regulation, 45 ECTS credits must correspond to a 'practical component', which includes in-school placements as well as exercises within the training institution but does not cover professional theoretical courses.
Czech Republic: Institutions are autonomous but must ensure that the professional training represents at least 18-23 % of total ITE, including 68 teaching hours (around 3 % of ITE). A professional course of 189 hours, lasting one to two years, may also be followed in parallel to or after a non-pedagogical Master's degree.
Germany: ITE consists of two phases: a first phase of concurrent education and a second phase of practical teacher training (*Vorbereitungsdienst*), which may last between 12 and 24 months depending on the *Land*. The first bar in the Figure displays the minimum total duration for the *Länder* with a First State Examination (*Erste Staatsprüfung*) at the end of the first phase; the second bar displays the minimum total duration for the *Länder* with a Master's degree at the end of the first phase. Generally, no ECTS credits can be acquired during the second phase of ITE. The length of professional training and in-school placements depend on the *Land*.
Ireland: Around 70 % of teachers qualify through the consecutive model and 30 % through the concurrent one.
Spain: According to the regulation, at least 16 ECTS credits must correspond to a 'practicum', which includes in-school placements as well as the final Master's dissertation.
France: For the majority of students who qualify as described in the Figure, a minimum number of weeks of observation at school is specified (4-6 weeks for students who passed the competitive examination at the end of year 4; 8-12 weeks for the others). The corresponding number of ECTS credits is at the discretion of the institution. In addition, students who passed the examination at the end of year 4 have 324 teaching hours in year 5. Those with a Master's degree in another subject and significant teaching experience (four years in public education or five in private education) may be exempt from part of the professional training. They represent 24 % of newly qualified teachers.
Croatia: The minimum duration of in-school placements is usually 20 hours, although there is no regulation.
Latvia: As part of the 'Mission Possible' programme (*Iespējamā Misija*), since February 2015, graduates with a general Bachelor's degree in a subject relevant to the school curriculum may qualify as a teacher while working as one, provided they follow a 650-hour professional curriculum which must be completed within the first two years of employment.

Lithuania: Students who have obtained at least a Bachelor's level qualification may start teaching, provided they complete the teacher qualification (corresponding to 60 ECTS credits) at the latest within the first two years of teaching. Two shorter programmes at Bachelor's level exist leading mainly to work in pre-school and primary education, with a concurrent format (of three-and-a-half years) and a consecutive one (4 years). The lengths of professional training and in-school placements are the same, corresponding to 60 and 30 ECTS credits respectively.
Luxembourg: Prospective teachers usually obtain their Master's degree abroad and subsequently undertake their professional training in Luxembourg. Professional training lasts two years. In-school placements represent 12 lessons a week (around 432 hours in all), but there is no ECTS equivalent.
Netherlands: A qualification at Bachelor's level (Grade 2) is sufficient to teach in lower secondary education. Graduates at Master's level (Grade 1) may in addition teach in upper secondary education. Grades 1 and 2 may both be obtained either via a consecutive or a concurrent route having the same characteristics in terms of minimum total duration, professional training and in-school-placements as the models displayed in the Figure. The duration of courses may in practice be reduced by up to a year depending on a student's previous educational qualifications and skills.
Austria: Teachers qualified via the consecutive model can teach in *Neue Mittelschulen* and *Allgemeinbildende höhere Schulen*. Teachers qualified via the concurrent model can teach in *Neue Mittelschulen* and *Hauptschulen.*
Poland: In-school placements represent 150 lessons of 45 minutes each in the case of both models, but there is no ECTS equivalent.
Slovenia: Students may either follow the professional programme while they prepare a Master's degree (consecutive route in the Figure) or follow a supplementary programme after having obtained the degree. In the latter case, the duration lasts one more year but the lengths for professional training and in-school placements are the same for both options.
Slovakia: A 'supplementary pedagogical study' (*Doplňujúce pedagogické štúdium*) of 200 hours (usually two years) may also be followed in parallel to or after a relevant non-pedagogical Master's degree. In-school placements represent a minimum of 40 hours, but there is no ECTS equivalent.
Sweden: Students with 180 ECTS credits in a minimum of two subjects relevant to the school curriculum (at least 90 ECTS credits for each of them) may have those credits recognised if they undertake ITE (90 ECTS). The total number of ECTS for this route is also 270 ECTS.
United Kingdom (ENG/WLS/NIR): For the consecutive model, the duration of the Postgraduate Certificate in Education (PGCE), which usually corresponds to a one-year programme, is not available under ECTS. For both models, in-school placements represent a minimum of 120 days with no ECTS equivalent. The concurrent programme mainly prepares students for work in pre-primary and primary education. In England, around 53 % of student teachers qualified through the consecutive model and 16 % through the concurrent one.
United Kingdom (SCT): In-school placements represent a minimum of 18 weeks, which is equivalent to 30 ECTS credits.
Liechtenstein: No teacher education is organised within the country. Most teachers are trained in Austria or Switzerland. The minimum requirement for recruitment is a Master's degree.
Norway: In-school placements represent 800 hours in the concurrent model and 480 in the consecutive one, but there is no ECTS equivalent.
Serbia: No programme is organised specifically for teacher training (in either the concurrent or consecutive format), but universities offer specific subjects relevant to teacher education. In order to become a teacher, students have to complete at least 30 ECTS credits in the fields of psychology, pedagogy, and teaching methodology, and at least 6 ECTS in-school placement credits.

In nine countries, the minimum proportion of professional training is a matter left to training institutions themselves. This usually applies to concurrent models of ITE, as in Belgium (Flemish Community), the Czech Republic, Greece, Slovakia, the United Kingdom, and the former Yugoslav Republic of Macedonia. In Latvia and the Netherlands, ITE institutions themselves determine the minimum length of professional training both in the concurrent and consecutive models. In Austria, they only do so in the consecutive model offered by universities.

In-school placements are part of professional training. On average, the minimum number of ECTS credits allocated to them under central regulations is 25. The number is 15 ECTS credits or even fewer in Bulgaria (the concurrent model), Estonia, Austria (the concurrent model), Romania, Slovenia, Serbia, and Turkey. In Montenegro, in-school placements are non-existent.

Institutions are freer to act as they wish as regards the distribution of time for activities within professional training, including in-school placements. In-school placements are administered by ITE institutions themselves in 13 education systems, namely those of Belgium (Flemish Community), the Czech Republic, Denmark, Greece, Spain, Croatia, the Netherlands, Austria (in the consecutive model), Portugal, Slovakia (in the concurrent model), Finland, Iceland, and the former Yugoslav Republic of Macedonia.

In two education systems of the United Kingdom, the link with in-school placement is at the heart of training and trainees may work towards school-based professional qualifications as teachers.

In the **United Kingdom (England)**, the government aims at increasing the proportion of training places that are led by schools, as mentioned in the 2011 consultation paper 'training our next generation of outstanding teachers' ([5]) and its subsequent implementation plan ([6]). Schools are taking on more responsibility for teacher training. Often organised within networks, they may be accredited as ITE providers and offer *school–centred initial teacher training* (SCITT) programmes. These provide practical, hands-on teacher training by experienced practising teachers based in their own school or at a school in the network. The *School Direct* programmes are another example of training programmes run by schools or groups of schools. Schools select applicants and an accredited ITE provider for the training, and are expected to employ trainees as qualified teachers on successful completion of a programme. All such programmes usually last one year and lead to *Qualified Teacher Status*. Candidates must hold a relevant first degree or its equivalent in an appropriate subject. Most of these programmes lead to the award of a *Postgraduate Certificate in Education* (PGCE) on successful completion.

In the **United Kingdom (Wales)**, the *Graduate Teacher Programme* offers a limited number of places for trainees (30 each for primary and secondary school teaching in 2015/16) who must be employed in a school undertaking to support them professionally and pay them as non-qualified teachers while they receive training and do some teaching. This programme, managed by the three Welsh regional centres for ITE, usually lasts up to one school year. Candidates must hold a first degree or its equivalent in an appropriate subject.

In a few countries, pathways also exist specifically for people wishing to change career and become teachers:

In **Denmark**, the 'Merit Teacher' programme (*Meritlærer*) enables those aged over 25 with an education initially unrelated to teaching to become teachers after satisfactorily completing the required course modules consistent with their educational background and work experience. This training is equivalent to 150 ECTS credits completed on a part-time basis over three years.

In the **United Kingdom (England)**, a salaried version of the *School Direct* programme targets people with at least three years of work experience. During training, trainees earn a salary as non-qualified teachers and teach on a reduced timetable.

Since 2000, reforms have been implemented in several countries, in particular to adapt the higher education system to the Bologna Bachelor/Master degree structure. The **minimum total duration of ITE** was increased from three to five years in **Poland** (2012/13), and from four to five years in **Estonia** (2001/02), **France** (2010/11), **Croatia** (in the concurrent model in 2008/09), **Slovenia** (2007/08), **Iceland** (in the concurrent model in 2011/12), and **Serbia** (2012/13). In **Austria**, the minimum total duration of ITE along the consecutive route was increased by six months (from four-and-a-half to five years) in 2012/13, and in **Montenegro** by two years (from two to four years) in 2002/03. In **Spain**, the minimum duration of ITE has been standardised at five years since 2009/10, whereas it was four years in a minority of universities until then. In **Hungary**, the minimum duration of the concurrent model of ITE, which previously depended on the provider (four years in colleges and five in universities), became a standard five years in 2013/14, and a consecutive model was introduced in 2009/10. The latter is currently being phased-out (2016/17 will be the last year of entry to the two-and-a-half-year professional programme).

In **Italy**, the minimum total duration of ITE was reduced to six years, instead of seven in 2011/12, thus shortening the professional training from two to one year and the number of ECTS credits for in-school placements from 30 to 19. As of 2014/15, the consecutive route in **Ireland** has been upgraded to a Master's degree, with at least five years of study (300 ECTS credits) and increased minimum duration for both professional training (from 60 to 108 ECTS credits) and in-school placements (from 24 to 48 ECTS credits). As of 2016/17, one single consecutive route at Master's level will exist in **Austria**, offering access to all types of lower secondary education. Its minimum total duration will be five years and a half (the equivalent of 330 ECTS credits), with at least 60 ECTS credits for professional training.

The proportion of **professional training**, which was previously fixed by the institutions concerned, has been regulated in **Spain** (2009/10), **France** (2013/14), **Latvia** (2010/11), and **Serbia** (2012/13). **Denmark** increased the minimum length of professional training from 80 to 90 ECTS credits in 2013/14. **Turkey** also did so in 2007/08.

The proportion of **in-school placements** has also been regulated in **Belgium** (in the Flemish Community in 2007/08), **Spain** (2009/10), and **Lithuania** (2010/11). Besides, **Hungary** increased the minimum duration of in-school placements from 30 to 50 ECTS credits in 2013/14 (concurrent model), **Ireland** has increased it from 15 to 24 weeks since 2013/14 (concurrent model), and **Turkey** also did so in 2007/08. In **Slovenia**, the 2008/09 reform introduced a more regulated framework for the minimum length of in-school placements. Before the reform, the regulations only contained the obligation to give students the opportunity to observe teaching and give lessons, with no specified minimum duration, and to provide them with unbroken in-school placements lasting two weeks. By contrast, **Latvia** decreased the minimum number of in-school placement credits in 2014/15 (from the equivalent of 39 to 30 ECTS credits).

([5]) See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/175363/DFE-00054-2011.pdf [Accessed 15 June 2015].

([6]) See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181154/DFE-00083-2011.pdf [Accessed 15 June 2015].

Highest qualification levels achieved by teachers

The TALIS 2013 survey illustrates the qualification levels achieved by teachers either in ITE programmes or by other means (see Table 2.1 in the Appendix) ([7]). According to the data collected via the survey, 92.5 % of teachers in the EU say that their qualification is at least a first stage academic tertiary degree (ISCED 5A, corresponding more or less to a Bachelor's degree (ISCED 6) in the 2011 classification). Only 5.4 % report that their highest qualification is an occupation-oriented tertiary degree (ISCED 5B), and 2 % that it is at a level below tertiary education. The minimum level of education required in the public sector to be a teacher (see Figure 2.1) applies generally to teachers' answers to the TALIS 2013 survey, including for those who work in the private sector.

The proportion of teachers with a qualification at a level below tertiary education is highest in Iceland (10 %). With 45.2 % of them aged at least 60, most of them are older teachers who certainly entered the profession before the ITE qualification was raised to tertiary level. Although the total proportion of teachers with a qualification at a level below tertiary education is very small, it is nevertheless around 10 % in the case of those aged under 30 in the Czech Republic, Denmark, Estonia, and Sweden. This may reflect a real shortage of teachers, or the fact that some students already work as teachers while still qualifying (or both).

The highest educational qualification achieved by teachers usually corresponds to the minimum level reached by ITE graduates. In some cases it may be higher. The fact that it corresponds at least to the minimum ITE level does not mean that teachers completed an ITE programme. In times of shortage in particular, people may be recruited to the teaching profession with an adequate level of qualification obtained through another type of programme. This may be detrimental to the quality of education as the teachers concerned may lack the professional skills normally required. It is therefore instructive to consider the proportion of teachers who actually completed ITE regardless of their level of qualification.

2.1.2. Completion of ITE

In this section, all European teachers surveyed by TALIS 2013 are considered, whether they work in the public, government-dependent or independent private sector. As shown in Figure 2.2, 91.2 % of all teachers in the EU have completed an ITE programme. This high overall proportion masks big variations between individual countries, ranging from 99.4 % in Poland to 71.4 % in Serbia. Three countries are clearly below the EU average proportion, namely the Czech Republic, Italy, and Serbia.

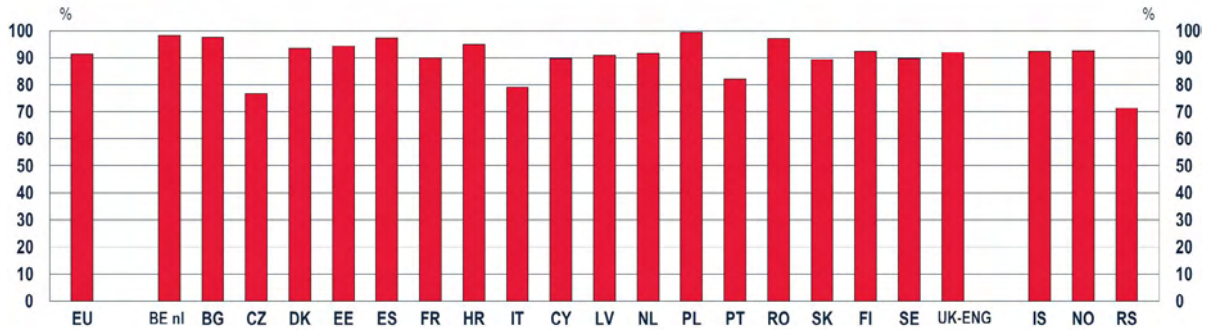
In the **Czech Republic**, Act 563/2004 on education staff authorised non-qualified teachers to work, on condition that they completed ITE by 31 December 2014 at the latest. Meanwhile, teachers aged at least 50 on 1 January 2015 have been freed from this obligation.

Because of a teacher shortage in **Italy** during the 1970s and 1980s, people could be recruited as teachers with just their subject degree qualifications.

In **Serbia**, the teaching profession attracted fewer students in the 1990s and faculty teaching programmes had to close. Graduates from study programmes unrelated to teaching were authorised to qualify as teachers.

([7]) The TALIS data was collected in accordance with the 1997 ISCED classification, whereas qualification levels referred to in Figure 2.1 were based on the 2011 ISCED classification (see the Glossary for more information on both classifications). This may be of significance, especially in the case of certain occupation-oriented tertiary level degrees which were considered as such in ISCED 1997 (ISCED 5B) but classified as Bachelor's degrees (ISCED 6) in the 2011 ISCED classification, sometimes with no change in the content or length of the studies concerned. This is for instance the case in the Flemish Community of Belgium, where the ITE qualification is at Bachelor's level since 2004/05, and where 85.4 % of teachers report in the TALIS 2013 survey that they obtained an occupation-oriented tertiary education qualification (at ISCED level 5B), which corresponds to a Bachelor's level (ISCED 6) according to ISCED 2011 classification.

Figure 2.2: Proportion of teachers in lower secondary education (ISCED 2) who have completed ITE, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 2.2 in the Appendix).

Country-specific note

Cyprus: The proportion of teachers, who have completed an ITE programme, is substantially higher – 96.9 % (0.51) – among those working in the public sector.

ITE completion by age

As most trainees in ITE are young, the proportion of teachers who have completed it, with respect to their current age group (see Table 2.3 in the Appendix) is a way to observe the completion age rate trends over time.

In the EU, the proportions, by age group, of teachers who have completed ITE have changed little over time. However countries as a whole reflect two main trends.

First, most education systems follow the same pattern as the EU average, with fairly stable proportions of teachers, by age group, who have completed ITE. This is the case in the Flemish Community of Belgium, Bulgaria, the Czech Republic, Denmark, Spain, France, Croatia, the Netherlands, Poland, Romania, Slovakia, Finland, Sweden, the United Kingdom (England), Iceland, and Norway.

In a second group of countries, the proportions of teachers among those aged under 30 who have completed ITE tend to be lower than in other age groups. This applies to Estonia, Latvia, and, in a stronger way, to Serbia. The lower proportion of teachers who have completed ITE in this second group of countries is cause for concern, especially as they are tending to display lower ITE completion rates in general (see Figure 2.2).

However, these trends need to be viewed with caution because of the fewer teachers aged under 30 in the TALIS 2013 sample. In Italy, Cyprus, and Portugal, the standard errors for teachers aged under 30 is even too high to draw any conclusion.

ITE completion by subject taught

There are no major variations, by subject taught, in the proportion of teachers who have completed ITE (see Table 2.4 in the Appendix). However, teachers who initially completed ITE focused on certain given subjects may now be teaching others for which they did not qualify at the outset ([8]).

([8]) Further information on such possible mismatches between subject(s) initially studied and subject(s) taught is given in OECD (2014), pp. 43-45.

2.1.3. Inclusion of teaching content, theory and practice

ITE may be organised in various ways. In some countries, trainee teachers with a first degree in a particular field can move on to a second phase devoted to professional training (the 'consecutive model' already discussed in section 2.1.1). In other countries, ITE includes both academic (school subject) and professional training (the 'concurrent model' in section 2.1.1). Irrespective of which model is adopted, the inclusion in ITE of some key components is very important for teachers to be fully equipped to do their job. In the TALIS 2013 survey, the three following components are considered:

- **Content**: it is essential that prospective teachers have sufficient academic knowledge of the subject(s) they will teach.
- **Theory of teaching (pedagogy)**: trainee teachers need to be *theoretically* prepared to teach their subject, support pupils in learning, and manage classes.
- **Practice**: it is important for trainee teachers to gain concrete experience in real classes as soon as possible, including learning how to handle real issues inherent in teaching and class management in a variety of situations. Practical experience may involve observation of classroom activity, as well as sole or shared responsibility for the conduct of some lessons under the guidance of an experienced teacher.

The data in this section concerns all teachers whether they work in the public, government-dependent or independent private sector.

Completion of ITE with all three components

Figure 2.3 shows that the proportion of all teachers who completed ITE and reported that it included all three foregoing components (teaching content, theory and practice) is above the EU average of 80 % in almost three-quarters of the education systems surveyed in Europe.

Figure 2.3: Proportion of teachers in lower secondary education (ISCED 2) who have completed an ITE programme that includes teaching content, theory and practice, 2013

Source: Eurydice, on the basis of TALIS 2013 (see Table 2.5 in the Appendix).

In four countries, the proportion is below the EU average, at around 75 % in Serbia and France, and only 63.2 % in Spain and 53.3 % in Italy. As already pointed out, the situation is even more disturbing in Italy and Serbia, where this factor coexists with a lower proportion of teachers who report having completed ITE (see Figure 2.2).

Completion, by age group, of ITE with all three components

The proportion of teachers, by age group, who said they had completed an ITE programme that included all three foregoing components (see Table 2.6 in the Appendix) is an indication of the trends over time.

The proportion of teachers who reported that their ITE included teaching content, theory and practice is around 90 % for all age groups in Belgium (Flemish Community), Bulgaria, Denmark, Estonia, Romania, Finland, the United Kingdom (England), and Norway. This points to the long tradition in these countries of combining teaching content, theory and practice in ITE.

In most European countries, the trend is positive. Younger teachers are more likely than their older colleagues to have completed ITE incorporating all three components. This trend is especially marked in France and Italy.

Only in Spain where a recent regulation (implemented in 2009/10) stipulates the integration of all three components in ITE, has this proportion remained consistently under 70 %.

Completion, by subject taught, of ITE with all three components

The kind of subject taught appears to have no impact on the proportion of teachers who said they completed ITE that included teaching content, theory and practice. The proportions for the main five subject areas taught (see Table 2.7 in the Appendix) correspond quite closely to the overall proportion (see Figure 2.3).

2.1.4. Feeling of readiness for teaching

Two different aspects of ITE have been considered so far, namely its completion and the inclusion within ITE programmes of teaching content, theory and practice. Figure 2.4 now focuses on how far teachers who have completed ITE feel ready for work based on teaching content, theory and practice, compared to those who have not. However, it should be noted that the respondents surveyed have different levels of experience in teaching. Some of them are new to the profession, whereas others have taught for many years. This may affect the findings represented in the Figure, as the feeling of readiness experienced by newcomers is more likely to be influenced by the quality of their ITE programme (assuming they completed one) than in the case of experienced teachers, who may also take account not just of their experience but of their continuing professional development (see Chapter 3).

The feeling of readiness is also a ‘relative’ indicator which may include cultural and other forms of bias. For example, teachers in some countries may be more or less reluctant to say they are well prepared, than those in others.

With due regard for these reservations, a focus on self-perceived readiness is useful in providing policy-makers with an indication of possible shortcomings in ITE which need to be analysed more thoroughly and remedied if necessary.

The data in this Figure concerns all teachers whether they work in the public, government-dependent or independent private sector.

A higher proportion of teachers in the EU feel very well prepared for their work when they have completed an ITE programme than when they have not. The comparative proportions for each of the three components are 62.3 % as opposed to 47.6 % (content), 41.4 % instead of 27.5 % (theory), and 46.4 % as against 31.9 % (practice). It therefore seems essential that all teachers should have the opportunity to complete such a programme.

Figure 2.4: The feeling of readiness among teachers in lower secondary education (ISCED 2) for work based on the content, theory and practice of teaching, depending on whether or not they have completed ITE, EU level, 2013

Source: Eurydice, on the basis of TALIS 2013 (see Table 2.8 in the Appendix, which includes data by country).

Furthermore, 95.5 % of teachers who have completed ITE feel well or very well prepared to work with the content of their teaching, 87.8 % to grasp its theoretical aspects, and 87.5 % to manage it in practice. This suggests that ITE needs to be strengthened, especially as regards the theory and practice of teaching. Improved mastery of the content seems to be less of a priority.

In the Czech Republic, Estonia, France, Romania, Slovakia, Iceland, and Serbia, the proportion of teachers who feel very well prepared for the **content** of their subject after completing ITE is significantly higher than in the case of those who have not done so. The difference is especially high for Romania.

In almost two-thirds of the countries surveyed, the proportion of teachers who say they feel very well prepared to work with the **theory** of teaching is significantly higher among those who have completed ITE than among those who have not. The difference in the feeling of readiness is especially high in Estonia, Poland, and Slovakia. It is significant, though not as markedly so, in Belgium (Flemish Community), Bulgaria, the Czech Republic, Croatia, Italy, Cyprus, Latvia, Romania, Finland, Sweden, and Iceland.

Finally, in half of the European education systems surveyed, the proportion of teachers who say they feel very well prepared for the **practical aspects** of teaching is also significantly higher among those who have completed ITE than among those who have not. The difference in the feeling of readiness is especially high in Romania, and Iceland. It is significant to a relatively lesser extent in the Czech Republic, Estonia, Croatia, Italy, Cyprus, Portugal, Slovakia, Finland, and Norway.

It is also noteworthy that in France and Finland, lower proportions of teachers who have completed ITE than in other countries feel very well or well prepared for their job, especially concerning teaching theory and practice. This too is a finding that national policy-makers could take into account.

It is clear from the foregoing that the completion of ITE has an impact on how far teachers feel ready for their work, especially where the theory and practice of teaching are concerned. These two components of ITE programmes need to be qualitatively reinforced in order to prepare prospective teachers more effectively for their profession.

The OECD also analysed the impact of including in ITE the teaching content, theory and practice for all or only some of the subjects taught. Its report states that 'the upward trend of being prepared is even stronger if teachers received this formal training for *all* the subjects they teach (as opposed to only *some* of the subjects they teach)' (OECD 2014, p. 37).

2.2. Transition to the teaching profession

As stated in the European Commission handbook for policy-makers on induction into the teaching profession, 'there is a broad consensus that becoming a teacher should be seen as a gradual process, including initial education, the induction phase and continuing professional development. The point at which newly qualified teachers transfer from ITE and move into professional life is seen as crucial for further professional commitment and development, and for reducing the number of teachers leaving the profession' ([9]).

2.2.1. The induction phase

As this section focuses on the transition to the teaching profession, its scope is limited solely to induction for newly qualified teachers ([10]).

Centrally regulated induction

According to regulations in the public sector, the induction phase is generally seen as a structured support programme for qualified first-time teachers. During induction, these teachers carry out all or many of the tasks incumbent on experienced teachers and are remunerated for their work. Induction has important formative and supportive components for them as they receive additional training, personalised help, and advice within a structured phase. This period lasts at least several months. Induction phases, as understood here, should not be confused with short introductory programmes on the work and organisation of a specific school. Such measures are of short duration (from a few days to several weeks) and usually provided by individual schools for all new teachers (whether inexperienced or otherwise).

In almost two-thirds of the countries, newly qualified teachers have access to structured induction phases which have many different organisational patterns. As shown in Figure 2.5, induction is usually a compulsory phase, except in Estonia, Slovenia, and the United Kingdom (Scotland), where it is simply recommended. In Germany, it is up to the *Länder* to decide on the organisation of an induction phase and its activities.

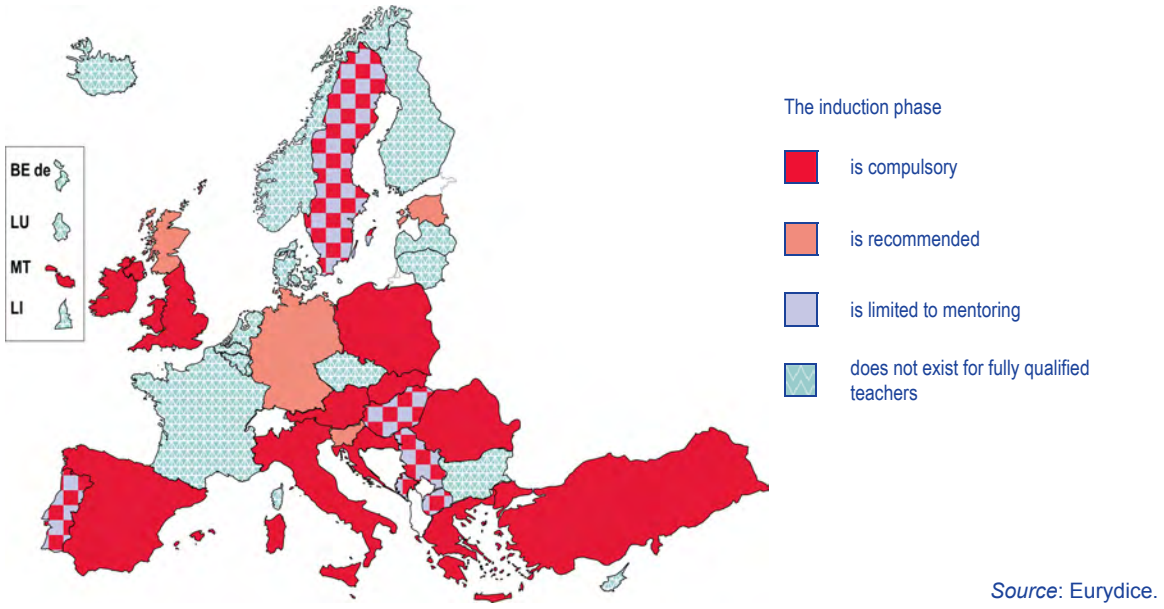
In some countries, the induction phase is limited to mentoring. This is the case in Hungary, Portugal, Montenegro, the former Yugoslav Republic of Macedonia, and Serbia. In Sweden, induction activities are organised at local or school level and only mentoring is compulsory.

Induction usually ends with an evaluation, which may confirm the recruitment of those concerned as teachers, or enable them to register as such. In Poland, new teachers in their induction phase are already fully employed in what is termed the ‘first stage’ of their professional status, so the evaluation leads to the ‘second stage’.

([9]) European Commission Staff Working Document SEC (2010) 538 final. *Developing coherent and system-wide Induction Programmes for beginning Teachers. A Handbook for policymakers*, p. 9. The document is available online at: http://ec.europa.eu/education/policy/school/doc/handbook0410_en.pdf [Accessed 15 June 2015].

([10]) The OECD examines the availability of induction programmes, which are defined more broadly to include both teachers new to the profession and teachers new to a particular school (OECD 2014, pp. 88-93).

Figure 2.5: Status of the induction phase for fully qualified first-time teachers in lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT
Duration	⊗	⊗	⊗	⊗	⊗	⊗	1-3 years	1 year	1 year	4 months	3 months -1 year	⊗	1 year	1 year
	CY	**LV**	**LT**	**LU**	**HU**	**MT**	**NL**	**AT**	**PL**	**PT**	**RO**	**SI**	**SK**	**FI**
Duration	⊗	⊗	⊗	⊗	2 years	2 years	⊗	1 year	1 year	1 year	1 year	1 year	1 year	⊗
	SE	**UK-ENG**	**UK-WLS**	**UK-NIR**	**UK-SCT**	**IS**	**LI**	**ME**	**MK**	**NO**	**RS**	**TR**		
Duration	1 year	1 year	1 year	1 year	1 year	⊗	⊗	1 year	1 year	⊗	1 year	1 year		

⊗ Central regulations do not exist for newly fully qualified teachers

Source: Eurydice.

Explanatory note

Induction is a structured support phase provided for newly fully qualified teachers. Induction as a part of professional training during the formal ITE programme is not considered, even if remunerated. During induction, new entrants carry out wholly or partially the tasks incumbent on experienced teachers, and are remunerated for their activity. Normally, induction includes training and evaluation, and a mentor providing personal, social and professional support is appointed to help new teachers within a structured system. The phase lasts at least several months, and can occur during the probationary period.

Durations in years correspond to school years.

Country-specific notes

Germany: The Figure corresponds to the situation in seven *Länder*, where induction lasts between one and three years. The induction phase is compulsory in Brandenburg (one year) and Hamburg (one compulsory year plus one optional one), but does not exist in the seven remaining *Länder*.
Spain: The content and duration of the induction phase vary depending on the Autonomous Community concerned.
France and **Luxembourg**: An induction phase is organised after the competitive examination for recruitment, but before teachers' full qualification.
Netherlands: Due to deregulation, schools are responsible for providing this kind of support.
Slovenia: The induction phase applies only to trainees recruited by the Ministry. Qualified candidates, directly recruited by schools to fill vacant posts, receive mentoring for only two months in order to prepare for the professional examination.
Sweden: With effect from 2014/15, the induction phase is no longer functioning as a probationary period although schools are still obliged to offer it.
United Kingdom (SCT): Only students with a teaching qualification who graduate from a Scottish higher education institution and whose training has been publicly funded are normally eligible for the induction phase. This includes students from other parts of the UK and the rest of the EU, provided they have been assessed as eligible for fees in Scotland.

The induction phase is offered in addition to the professional training provided during ITE. It usually lasts one school year, except in Greece and Spain (in some Autonomous Communities), where it may be shorter, and in Hungary and Malta where it lasts two years.

Since 2000, an induction phase has been introduced in **Malta** (2010/11), **Portugal** (2012/13), **Romania** (2012/13), **Sweden** (2011/12), and the **former Yugoslav Republic of Macedonia** (2008/09). In **Cyprus**, the national induction phase was abolished in 2012/13, as a result of budget restrictions.

In **Austria**, the induction phase will become compulsory for all first-time teachers from 2015/16.

In two countries, which hold competitive examinations during ITE, an induction phase with remunerated teaching activities is organised during the professional training of students, instead of at the start of their teaching career.

Besides the organisation of an induction phase for qualified teachers in most *Länder* in **Germany**, all graduates (with a First State Examination or a Master's degree in ITE, depending on the particular *Land*) have to undertake *Vorbereitungsdienst* (remunerated preparatory service at school of between one and two years, again depending on the *Land*), in order to pass their Second State Examination (*Zweite Staatsprüfung*). This examination is a necessary condition for permanent employment as a teacher, but does not guarantee it.

In **France**, students may take the competitive examination at the end of year 4 or year 5. Only the former are remunerated for teaching activities in year 5.

In **Luxembourg**, where the competitive examination is held before the start of two-year professional training, students are remunerated during those two years.

Induction phases, where they exist, are usually available for all first-time teachers in public education, irrespective of their status. However, in Spain and Turkey, where teachers are recruited as career civil servants (see Chapter 1, Figure 1.5), the induction phase is limited to permanent staff. This is also the case in Italy, where teachers are recruited with contractual status. In Austria, the induction phase has so far only been offered to graduate teachers who have followed the consecutive route through ITE at university.

Participation in induction

The Eurydice data in Figure 2.5 provides information on current regulations concerning the induction phase. In the TALIS 2013 survey, teachers were asked whether they took part in a formal induction programme as new teachers, thus providing information on practice. However, Eurydice information concerns current regulations for the public sector whereas TALIS data refer to teachers' experience in the past, and concern teachers working either in the public, the government-dependent or independent private sector.

Figure 2.6 shows the proportion of teachers with at most five years of experience, who said that they took part in such a programme. Focusing on teachers with less experience is one way of indirectly gaining an insight into the most recent trends concerning participation in induction.

Almost 60 % of less experienced teachers in the EU said that they had taken part in a formal induction programme when they entered the profession. These education systems were Belgium (Flemish Community), Bulgaria, France, Croatia, the Netherlands, and the United Kingdom (England). The corresponding proportions in individual education systems were highest in Bulgaria and the United Kingdom (England), at 81.1 % and 92.9 % respectively. Out of these six education systems, only those in Croatia and the United Kingdom (England) have central regulations which make the induction phase compulsory in the public sector (see Figure 2.5). In Belgium (Flemish Community), Bulgaria, and the Netherlands, the rates are high despite the lack of any such regulations. This means that local

authorities or schools themselves frequently arrange induction periods for their newly qualified staff. France also comes into this category, although survey respondents may have considered the induction phase organised in the final phase of ITE as support for first-time teachers.

In Estonia, Italy, Latvia, Finland, Sweden, Iceland, and Norway, the proportion of those who reported that they had been formerly involved in induction was under 30 %. Out of these seven education systems, only those in Italy and Sweden have central regulations which make the induction phase compulsory. However, this phase is limited to permanent staff recruited in the public sector in Italy, and the regulation was first introduced in 2011/12 in Sweden.

Figure 2.6: Proportion of teachers with no more than five years of experience in lower secondary education (ISCED 2) who took part in formal induction programmes as newcomers to teaching, 2013

Source: Eurydice, on the basis of TALIS 2013 (see Table 2.9 in the Appendix).

Main factors affecting participation in an induction phase

Several factors may determine whether first-time teachers take part in an induction programme. Table 2.10 (in the Appendix) indicates the odds ratios of several such factors identified from material in the TALIS 2013 database. In order to avoid statistical redundancy, all results shown below refer to the predictive power of each factor, considered under the control of all others.

The aspects taken into account relate to:

- a teacher's age and experience (both as a teacher and in the school);
- a teacher's employment status;
- contextual factors such as the availability of an induction programme for new teachers at the school (as reported by the school head), and the school location and enrolment.

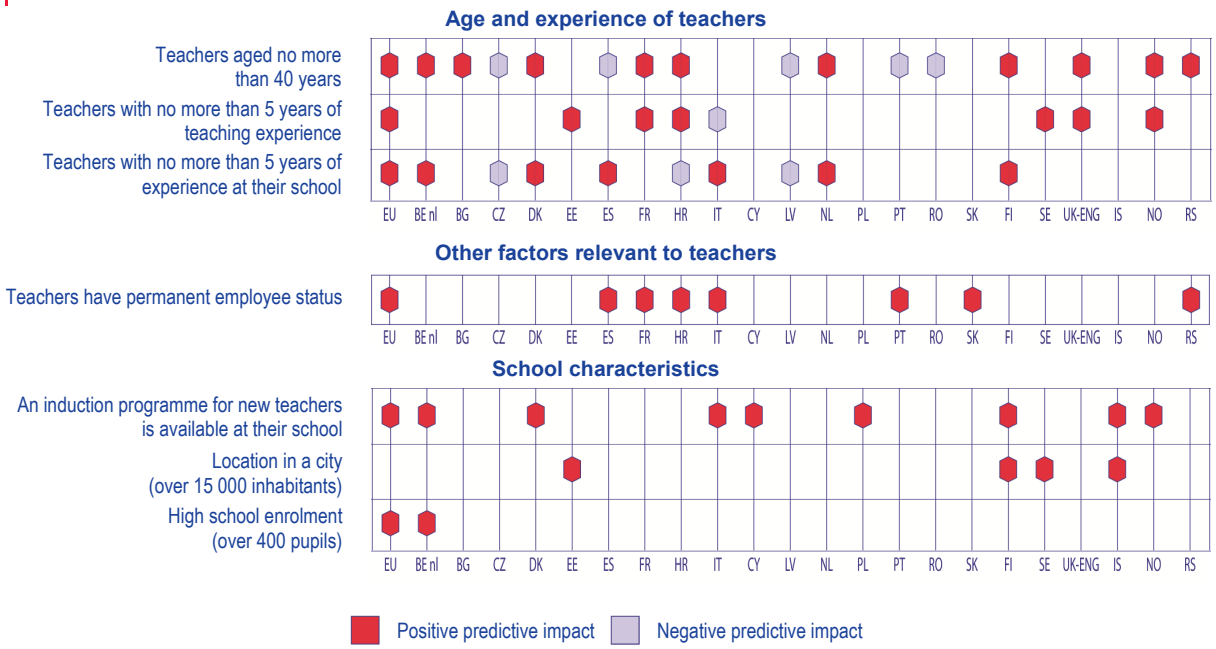
As shown in Figure 2.7, the fact that teachers are '**aged no more than 40 years**' is the main factor predicting whether they have taken part in an induction programme as newcomers to their profession, meaning that induction phases were introduced more recently. This factor has a positive impact in 10 education systems, and a negative one in five. In four education systems, this trend is reinforced with the predictive factor '**no more than five years of teaching experience**'.

The second main predictive factor among those selected is the **availability of an induction programme for new teachers at their school**. It is a predictor in nine education systems, in which the induction phase is organised by schools themselves and not by ITE institutions, except in the case of Italy where the responsibility is shared between schools and the central and regional authorities.

'**Permanent employee status**' has a predictive impact in seven countries. In the TALIS 2013 questionnaire, all teachers, regardless of their age, were asked whether they took part in an induction phase as newcomers to their profession. Employment status is not therefore related to their status

during the induction phase but to their current status. Hence it is not surprising that most teachers who took part in an induction phase have become permanent employees in the meanwhile. It is worth noticing the particularly high odds ratios for France (12.9) and Italy (14.5).

Figure 2.7: The predictive value of certain selected factors in participation by teachers in lower secondary education (ISCED 2) in induction programmes, as newcomers to their profession, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 2.10 in the Appendix).

Explanatory note

For explanation of multiple logistic regressions, see the Statistical Note.

As regards the school itself, its **'location in a city (over 15 000 inhabitants)'** is a predictive factor in only four countries, namely Estonia, Finland, Sweden, and Iceland. But **'high school enrolment (over 400 pupils)'** has no real predictive impact regarding teacher participation in an induction programme, except in the Flemish Community of Belgium.

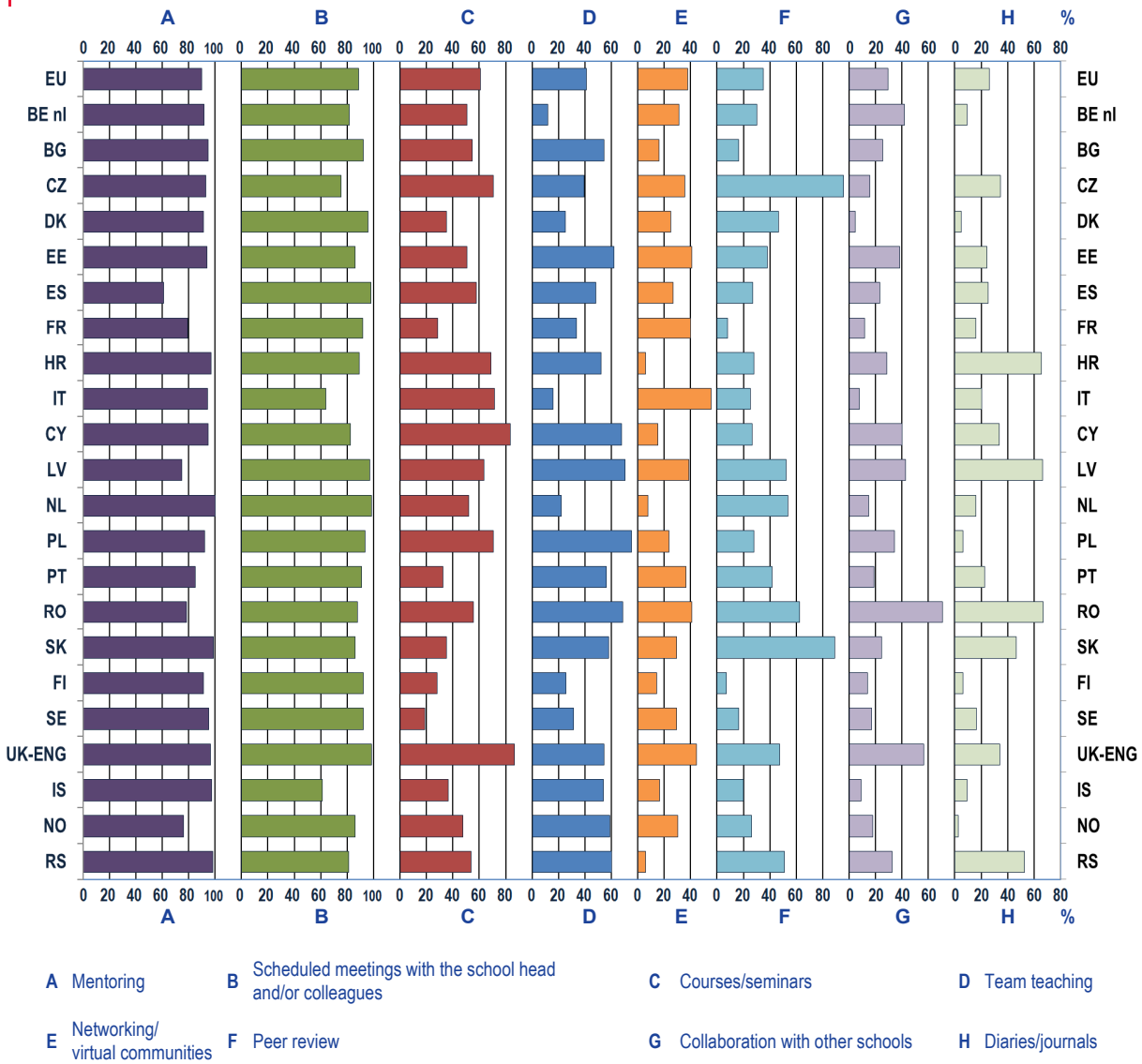
Types of activity organised by schools

In the TALIS 2013 questionnaire, school heads were asked whether an induction programme was available in their school and, if so, what were its main activities. Figure 2.8 only considers the answers of heads who said that their programme targeted new teachers. However, 'new teachers' might refer either to newcomers to the teaching profession or experienced teachers new to the school. Furthermore, activities in schools represent only part of the overall provision of induction programmes which may also be organised by initial training institutions and local, regional or central authorities. Despite these reservations, the information given here may convey an approximate idea of the activities included in induction programmes for first-time teachers.

Two activities are prominent in induction programmes for new teachers, namely **mentoring** and **scheduled meetings with the school head and/or other colleagues**. The second activity is in fact very close to a mentoring system. In the EU, 89.6 % of teachers have access to induction programmes, which include a mentoring system and 88.5 % to those with scheduled meetings. Less

than three-quarters of the teachers have access to programmes for new teachers at schools that include mentoring activities in Spain (61.1 %). This also applies to programmes with scheduled meetings with the school head or other colleagues in Italy (63.7 %) and Iceland (60.9 %).

Figure 2.8: Proportion of teachers in lower secondary education (ISCED 2) who can access certain types of activity within induction programmes, as reported by school heads, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 2.11 in the Appendix).

Courses and seminars are available to 60.8 % of teachers in induction programmes in the EU. The proportions are especially high in Cyprus (83.3 % of teachers) and the United Kingdom (England, for 86.4 % of teachers). Under a third of teachers in France (28.5 %), Portugal (32.2 %), Finland (27.9 %), and Sweden (18.7 %) have access to programmes including courses and seminars.

Other activities may involve **team teaching** (for 40.8 % of teachers in the EU), **networking/virtual communities** (37.5 %), **peer review** (34.8 %), **collaboration with other schools** (29.2 %), and **diaries/journals** (26.0 %). These activities are not very evenly distributed and are more common in some countries than others. In Romania, over two-thirds of teachers have access to induction programmes for new teachers organised by schools, which include team teaching, collaboration with

other schools, and diaries/journals. Much the same applies to Latvia (except in the case of peer review), to Cyprus and Poland (but solely as regards team teaching), and the Czech Republic and Slovakia (solely peer review).

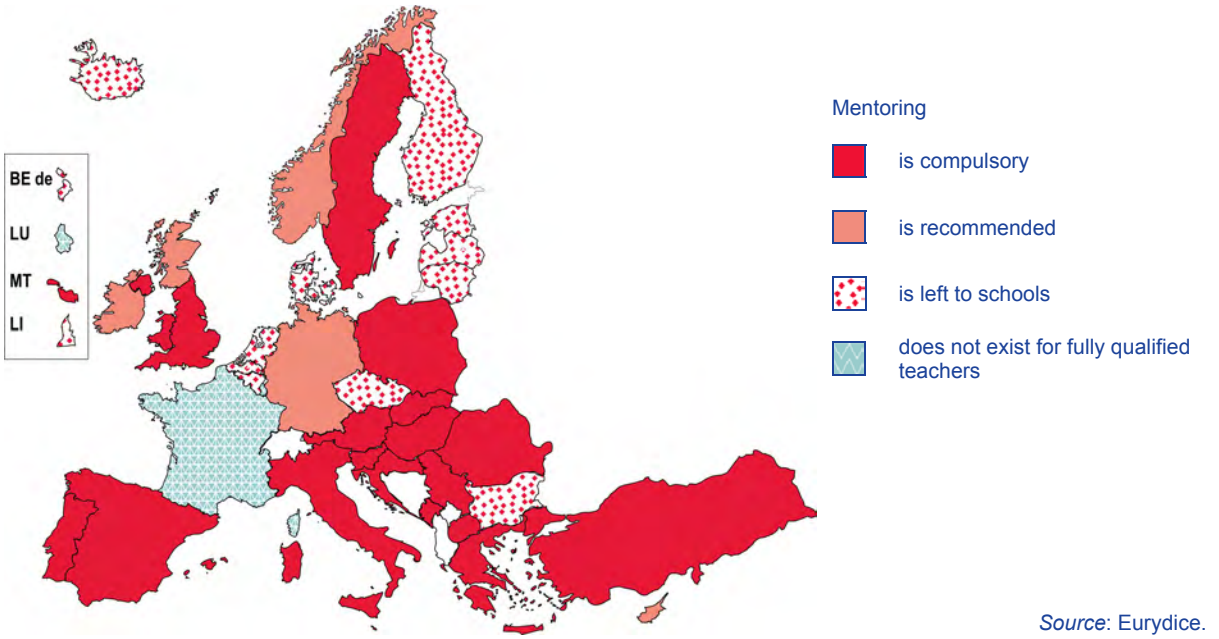
As shown in Figure 2.8, mentoring is – according to school heads – the most common activity in school induction programmes for new teachers. Hence the next section of this chapter examines it more closely.

2.2.2. Mentoring

Centrally regulated mentoring

Although not all countries in Europe offer a comprehensive, system-wide induction phase to first-time teachers working in the public sector (see Figure 2.5), support in the form of mentoring is available in almost all of them.

Figure 2.9: Mentoring support for fully qualified first-time teachers in lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

Explanatory note

Mentoring support refers to professional guidance provided to teachers by more experienced colleagues. Mentoring can be part of the induction phase for teachers new to the profession, but may also be available to any teachers in need of support.

Mentoring support during the formal ITE programme is not considered.

Country-specific notes

Germany: Mentoring support is generally available in *Länder* that organise an induction phase.
Estonia, Spain, Italy, Portugal, and **Turkey**: Mentoring is available solely to first-time teachers with permanent employment status.
Greece: Mentoring support has not been implemented yet. The Ministry first need to decide on mentors' specific qualifications.
France: Mentoring support is organised after the competitive examination for the recruitment, but before teachers' full qualification. As of 2015/16, mentoring support will be introduced for fully qualified first-time teachers in priority education zones.
Luxembourg: Mentoring support is organised after the competitive examination for the recruitment, but before teachers' full qualification.
Austria: Mentoring is only compulsory for graduate teachers who have followed the consecutive route through ITE at university. From 2015/16, it will become compulsory for all new teachers.

In countries with a compulsory induction phase, mentoring is most often prescribed for fully qualified first-time teachers, except in Ireland where it is only recommended. It is thus prescribed for newcomers to teaching in Greece, Spain, Croatia, Italy, Malta, Austria, Poland, Portugal, Romania, Slovakia, Sweden, the United Kingdom (England, Wales, and Northern Ireland), Montenegro, the former Yugoslav Republic of Macedonia, Serbia, and Turkey. In Greece, however, no mentoring schemes have been organised to date, as no ministerial decision on the qualifications and duties of mentors or on the process for selecting them has yet been taken. In Poland and the United Kingdom (Northern Ireland), the teachers receive continued mentoring after the induction phase.

In **Poland**, first-time teachers are recruited as 'trainee teachers' (*nauczyciel stażysta*) on a one-year contract corresponding to the induction phase. On successful completion of this phase, they are employed as 'contract teachers' (*nauczyciel kontraktowy*) on a permanent contract. In order to become 'appointed teachers' (*nauczyciel mianowany*), they need to complete further assessment after two years and nine months (at the earliest). They receive mentoring in preparation for this assessment.

In the **United Kingdom (Northern Ireland)**, teachers who are in their second and third years of teaching continue to have a tutor.

In countries where the induction phase is recommended, mentoring may be compulsory, as in Slovenia, recommended as in the United Kingdom (Scotland), or a matter left to the initiative of individual schools (Estonia). In Germany, the status of its provision varies depending on the *Land* concerned.

Where mentoring is offered in countries with no regulated induction phase for fully qualified first-time teachers, it is most often left to schools themselves, as in Belgium, Bulgaria, the Czech Republic, Denmark, Latvia, Lithuania, the Netherlands, Finland, Iceland, and Liechtenstein. However it is recommended in Cyprus and Norway.

In France and Luxembourg where mentoring is an important part of the final qualifying phase in ITE, no mentoring is organised for newly fully qualified teachers.

Since 2000, mentoring systems for newcomers to teaching have been implemented in **Malta** (2012/13), **Portugal** (2012/13), and the **former Yugoslav Republic of Macedonia** (2008/09). In **Latvia**, a regulation is in preparation and 1 000 teacher-mentor have been trained since 2011. In **Norway**, the Ministry of Education and Research and the Norwegian Association of Local and Regional Authorities are currently working on a mentoring strategy to support first-time teachers.

Proportion of teachers who receive mentoring

The TALIS 2013 survey asked teachers whether they currently had a mentor, thus providing information on the scale of mentoring. The TALIS questionnaire assumes that the latter is not necessarily restricted to transition to the teaching profession, but an activity from which all teachers may benefit regardless of their professional experience. This section focuses mainly on mentoring as a form of support for transition to the profession ([11]).

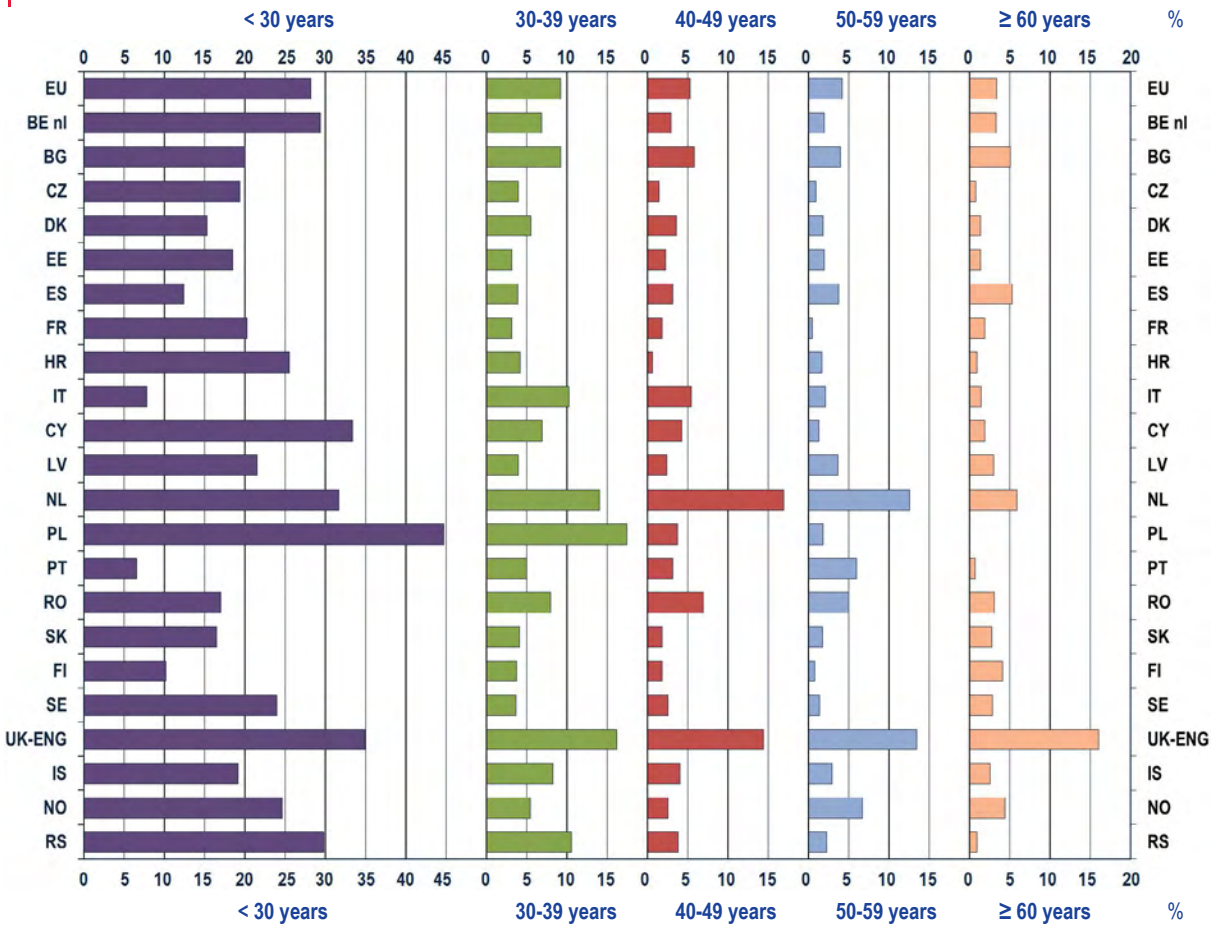
Because those new to the teaching profession are generally younger than more experienced teachers, the proportion, by age group, of teachers who report that they currently have a mentor is a useful approximation in determining whether mentoring is mainly used to assist newcomers in transition to the profession, or to support more experienced teachers in difficulty.

Figure 2.10 includes answers provided by all European surveyed teachers, whether they were working in the public, government-dependent or independent private sector. It shows that mentoring is mainly linked to the transition phase for new teachers. This is borne out by the central regulations of countries, which in most cases regard mentoring as a form of support specifically for qualified first-time teachers.

([11]) See also OECD (2014), pp. 93-96.

At 28.2 %, the proportion of teachers in the EU aged under 30 who report that they currently have a mentor is over three times as high as the corresponding proportion of those in the 30-39 age group (9.2 %). In almost all countries, the proportion of teachers aged under 30 with mentors is higher than in any other age group. It would doubtless have been higher still if TALIS 2013 had oversampled teachers with no more than one year of experience, so that statistics on this particular group could be processed. It is likely that a higher proportion of teachers aged under 30 no longer have mentors because the period of formal mentoring is limited in time. The proportion is at its highest in Poland (44.7 %), in which mentoring is provided for an extended period beyond the induction phase until new teachers are promoted to the third professional grade (see the special note on Poland above).

Figure 2.10: Proportion, by age group, of teachers in lower secondary education (ISCED 2), who have currently been assigned a mentor, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 2.12 in the Appendix).

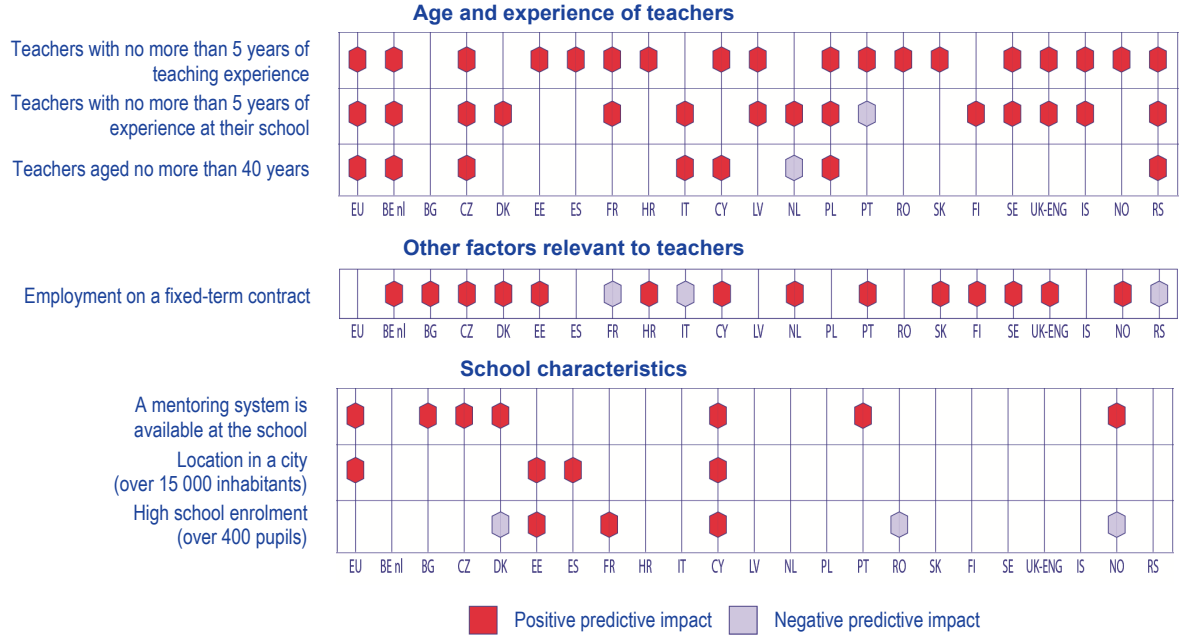
The proportion of teachers aged under 30 who report that they currently have a mentor is around 30 % or more in just five countries. In Poland, the United Kingdom (England), and Serbia, central regulations concerning the public sector also state that this is compulsory (see Figure 2.9) whereas in Cyprus it is simply recommended. The Netherlands is the only country with a corresponding proportion of over 30 % despite the fact that mentoring is at the discretion of individual schools.

In only two education systems do at least 10 % of the teachers in all age groups report that they currently have a mentor: they are those of the Netherlands (except in the case of teachers aged 60 plus), and the United Kingdom (England). However, even in these two systems, it is still twice as common for teachers to have a mentor when aged under 30. This is understandable as less experienced teachers are arguably more likely to need this type of support.

Relevant factors in assessing the likelihood of mentoring

Figure 2.11 illustrates the predictive value of seven factors identified from material in the TALIS 2013 database in the current assignment of a mentor. The impact of each factor is analysed under the control of all others.

Figure 2.11: The predictive value of certain selected factors in the current assignment of a mentor to teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 2.13 in the Appendix).

Explanatory note

For explanation of multiple logistic regressions, see the Statistical Note.

These factors relate to:

- teacher's age, experience (both as a teacher and in the school) and employment status;
- contextual factors such as the availability of a mentoring system at the school (as reported by the school head), and the school location and enrolment.

Out of the three main predictive factors, two are related to the experience of teachers. **'No more than five years of teaching experience'** is a positive predictor in 17 education systems, and **'no more than five years of experience at their school'** is a positive predictor in 13 countries. This confirms that 'the current assignment of a mentor' is linked to transition to the teaching profession, as shown in the proportions by age group of teachers with a mentor (see Figure 2.10). The fact that teachers are **'aged no more than 40 years'** also has predictive value in six education systems, although with a negative impact in the Netherlands which, together with the United Kingdom (England), is one of two countries in Europe in which older, more experienced teachers also have mentors.

The third main predictive factor is **'employment on a fixed-term contract'**, which is attributable to the fact that, in many countries, new teachers start with a probation period. By contrast, France, Italy, and Serbia exhibit the reverse trend, as the predictive factor is employment on a permanent contract. Indeed in France, the induction phase with a mentor is organised for those who have passed a competitive examination to become permanent teachers, and in Italy for those that have a permanent contract.

The **availability of a mentoring system at the school** is a predictive factor in six education systems.

The school's **'location in a city (over 15 000 inhabitants)'** and **'high school enrolment (over 400 pupils)'** do not have a strong impact on the current assignment of a mentor, although both factors have a positive predictive value in three education systems, while 'high school enrolment' has a negative predictive impact in three others.

While a mentor may be able to help more experienced teachers facing difficulties in complex or unfamiliar situations, this type of support is still mainly intended for newcomers to teaching.

2.2.3. The profile, preparation and designation of mentors

Mentors are experienced teachers often employed at a higher professional grade than the teachers they mentor. They may be appointed by the school head, or the local or regional authority, or be accredited mentors. Some countries have implemented training or support intended specifically for them.

In the **Czech Republic**, the 2014-15 project known as *Mentoring začínajících učitelů* (or 'mentoring support for teachers new to the profession') which has been developed by the Business Leader Forum under the auspices of the Ministry of Education, Youth and Sports, involves several schools. It aims to provide them with a comprehensive methodology for mentoring and networking with other schools, and to enable their experienced teachers to develop comprehensive mentoring skills. In July 2014, the National Institute for Education launched a one-year project called 'lecturers and mentors for schools' (*Lektoři a mentoři pro školy* – LAMS), which aims to disseminate information about mentoring and get teachers of various subjects involved in the implementation of mentoring in schools.

In **Estonia**, mentors must have at least three years of experience in teaching as well as experience of development work, and have completed a 160-hour mentor training curriculum at a university prior to appointment, or while supervising junior teachers in the induction phase.

In **Ireland**, many schools have now trained staff teachers to act as mentors. They need to have undertaken a 20-hour training course organised via the National Induction Programme for Teachers (NIPT). They may also get support as mentors via telephone contact, email and the Internet (www.teacherinduction.ie).

In **Latvia**, almost 1 000 mentors were trained by the University of Latvia between 2010 and 2013, under the project called *Inovatīva un praksē balstīta pedagogu izglītības ieguve un mentoru profesionālā pilnveide* (the project for 'innovative and practice-based teacher training and mentors' professional development') financed by the European Social Fund. Details on all mentors who graduated from the 72-hour course can be found in an electronic database which can be accessed by teachers searching for mentors.

In **Romania**, the County/Bucharest School Inspectorates arrange for the selection of mentor-teachers on the basis of a competition including both theoretical and practical tests.

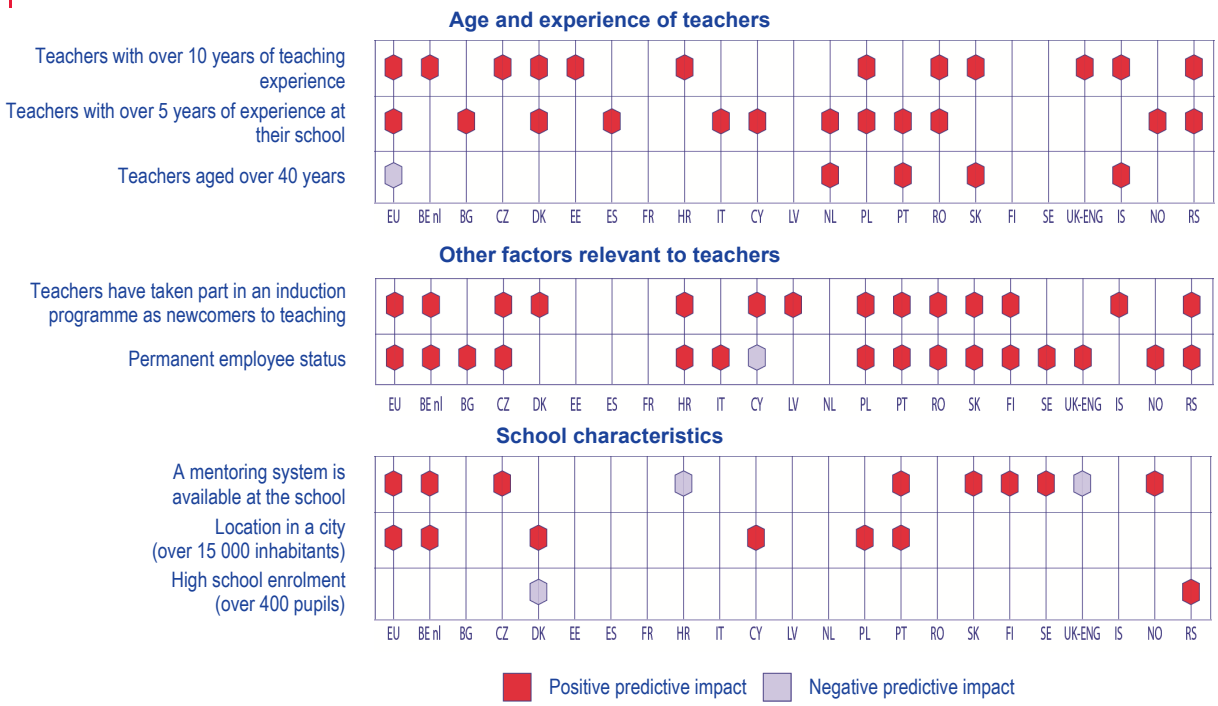
In **Montenegro**, a three-day training programme was organised for mentors by the Bureau for Education Services in 2010/11 and 2011/12. In 2012/13, the training was organised for all school continuing professional development (CPD) coordinators. These coordinators are in charge of providing support to mentors at school. The Bureau for Education Services has also published a handbook to support mentors.

The TALIS 2013 survey also asked teachers whether they currently acted as mentors for one or more of their colleagues.

Several factors have been selected from material in the TALIS 2013 database to assess their predictive value in the designation of teachers as mentors. In Figure 2.12, each factor is examined under the control of all others. The selected factors relate to:

- teacher's age and experience (both as a teacher and in the school);
- other concerns relevant to teachers, such as their employment status or whether they took part in an induction programme as newcomers to teaching;
- contextual factors such as the availability of a mentoring system at the school (as reported by the school head), and the school location and enrolment.

Figure 2.12: The predictive value of certain selected factors in the designation, as mentors, of teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 2.14 in the Appendix).

Explanatory note

For explanation of multiple logistic regressions, see the Statistical Note.

A predictive factor in 13 education systems is that **'teachers have taken part in an induction programme as newcomers to teaching'**. As the OECD (2014, p. 96) states, 'these results suggest that early policy interventions as, for example, participating in an induction programme as a beginning teacher, might have a long-term impact on teachers' later willingness to help other teachers to improve their teaching capacities'.

Another teacher-related factor with strong predictive value in the designation of mentors is the **'permanent employee status'** of the teachers concerned. It is a predictor in 14 education systems, although the status may partially depend on their experience, in so far as the greater the experience of teachers, the greater the likelihood of them securing a permanent contract.

Understandably enough, the experience of teachers is of considerable significance in almost all education systems. **'Over 10 years of teaching experience'** is a predictive factor in 11 systems, as is **'over five years of experience at their school'**. Both factors are of positive predictive value in Denmark, Poland, Romania, and Serbia. The fact that teachers are **'aged over 40 years'** is predictive in only four education systems (in the Netherlands, Portugal, Slovakia, and Iceland), in each case in combination with the impact of either teaching experience or experience at their school.

Two factors related to the school context have some predictive impact. When **'a mentoring system is available at the school'**, the odds that teachers will be designated as mentors are increased in seven education systems. The location of their school **'in a city (over 15 000 inhabitants)'** is a positive predictive factor in five education systems, but **'high school enrolment (over 400 pupils)'** has negligible predictive value.

As one might expect, the experience and qualifications of mentors stand in some contrast to those of the teachers they mentor. Mentors are experienced teachers often employed on a permanent basis, and their own participation in an induction phase when they first entered the teaching profession is in many countries a key consideration when they are subsequently designated to perform their role.

CHAPTER 3: CONTINUING PROFESSIONAL DEVELOPMENT

Continuing Professional Development (CPD) for teachers is at the heart of the European strategy for improving the quality of education. The Council conclusions of May 2014 ([1]) highlight that the provision of high quality CPD is crucial to ensuring that teachers 'possess and maintain the relevant competences they require to be effective in today's classrooms'. They also stress the importance of aligning CPD to the changes in teaching and learning, and of fostering cross-disciplinary and collaborative approaches, as well as digital competences and the use of open educational resources. The conclusions point to more flexible approaches to CPD that apply adult learning methods based on communities of practice, online learning and peer learning, but also to support and training for teachers in effective and innovative teaching methods.

The TALIS 2013 report (OECD, 2014) offers an interesting insight into teachers' self-perception of needs and participation in CPD, as well as enablers in participation and barriers to it. The report emphasises that overall teacher participation in professional development activities is high, with women and permanent teachers taking part more than men and non-permanent colleagues. The OECD (2014) also underlines the influence of financial support on the intensity of participation in CPD, although in some countries other non-financial incentives seem to function equally well. On the other hand, both lack of incentives and conflicts with the work schedule seem to be the most common reasons for not taking part in CPD.

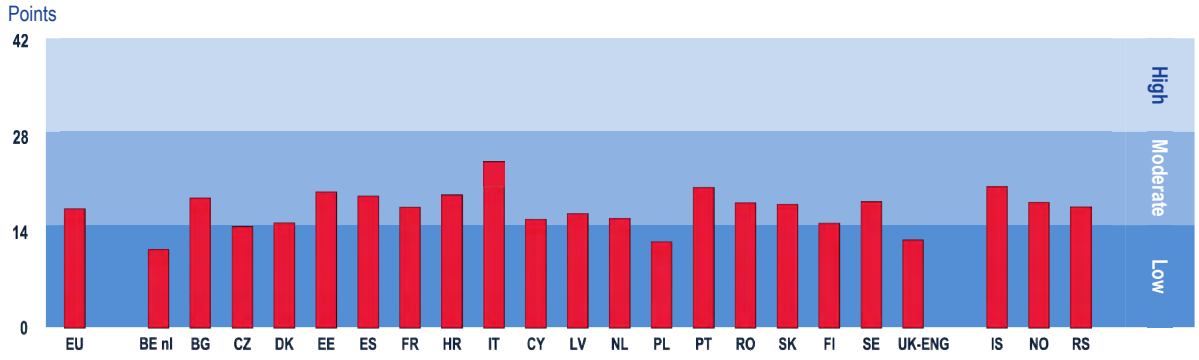
This chapter interlinks results from a secondary analysis of needs, participation, enablers, and barriers to CPD, as expressed by teachers in the TALIS 2013 questionnaire, with data on national and regional regulations and policies gathered from within the Eurydice Network. It provides a more focused perspective than TALIS 2013 both in terms of scope, as it narrows down the focus to European countries, and in terms of perspective, as it deepens the exploration of specific aspects such as needs related to age, participation, or legislation. It also examines structural elements of CPD as conceived in the legislation of different education systems and the levers designed by policy-makers to enhance participation.

3.1. Needs

The needs that professional development activities are expected to satisfy vary both between and within European education systems. Figure 3.1 shows that in almost every country the total mean of needs expressed by teachers falls in the moderate band, with Belgium (Flemish Community), Poland, and the United Kingdom (England) just below it. At the other extreme, Italy clearly is at the higher end of the band, with Bulgaria, Estonia, Spain, Croatia, Portugal, and Iceland not far behind. The EU average and the position of some countries with teachers expressing low needs provides an encouraging picture. However, this result overall is not always reflected in the trends exhibited by single variables.

([1]) Conclusions on effective teacher education. Education, Youth, Culture and Sport Council meeting. Brussels, 20 May 2014.

Figure 3.1: Scale of overall needs in professional development, as expressed by teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.1 in the Appendix).

Explanatory note

A scale of needs has been computed ranging from 'no need at all' in all areas, equal to zero, up to 'high level of need' in all areas, as listed in TALIS 2013, equal to 42 points. Needs are considered as 'low' from 0 to 14, 'moderate' from 15 to 28, and 'high' from 29 to 42 points.

3.1.1. Needs with respect to age and experience

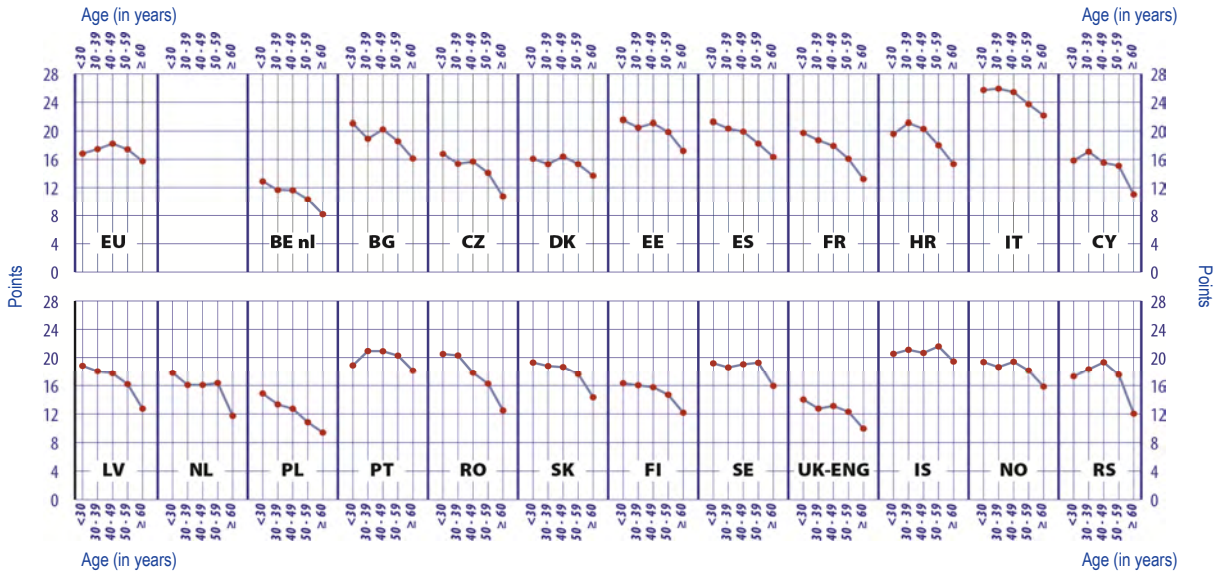
Figure 3.2 reveals that the EU average varies little among the five age groups concerned. It has a shallow 'reversed U' shape, with the youngest and oldest teachers expressing fewer needs than teachers aged between 40 and 49. In Italy, Portugal, and Iceland, all age groups express higher needs than the EU average.

Moreover, individual countries seem to reflect one of two different patterns. The first corresponds to broadly similar needs levels in each of the first four age groups but then a clear fall in needs among teachers aged 60 or over, as in the Nordic countries, Cyprus, the Netherlands, Slovakia, the United Kingdom (England), and Serbia. The second pattern is one of steadily decreasing needs, as displayed in the case of Spain, France, Croatia, Latvia, and Romania. Whatever the pattern, however, the mean need expressed by teachers aged 60 plus is always lower than in any other age group. In Latvia and the Netherlands, for example, the mean drops by 6.1 points between the category expressing the highest needs (< 30) and teachers aged 60 or over, while in Romania this difference is as high as 8. Except in Italy and Portugal, the average need expressed by teachers aged 60 or over in all countries falls below the EU average (for all ages combined), and in many of them the same age group express generally low levels of needs. It is also worth noting that in Belgium (Flemish Community), Poland, and the United Kingdom (England), the mean need expressed is always below the EU average, whatever age group is considered.

Experience appears to influence needs in much the same way as do age groups (see Table 3.3 in the Appendix).

Given the similarity of the trends (see Figure 3.2) with respect to age group and experience, it is conceivable that the lower needs level reported by the most experienced or the older teachers is a reflection of diminished motivation in their later career, rather than an objective self-assessment of their needs.

Figure 3.2: Scale of overall needs in professional development, as expressed by teachers in lower secondary education (ISCED 2), according to age group, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.2 in the Appendix).

Explanatory note

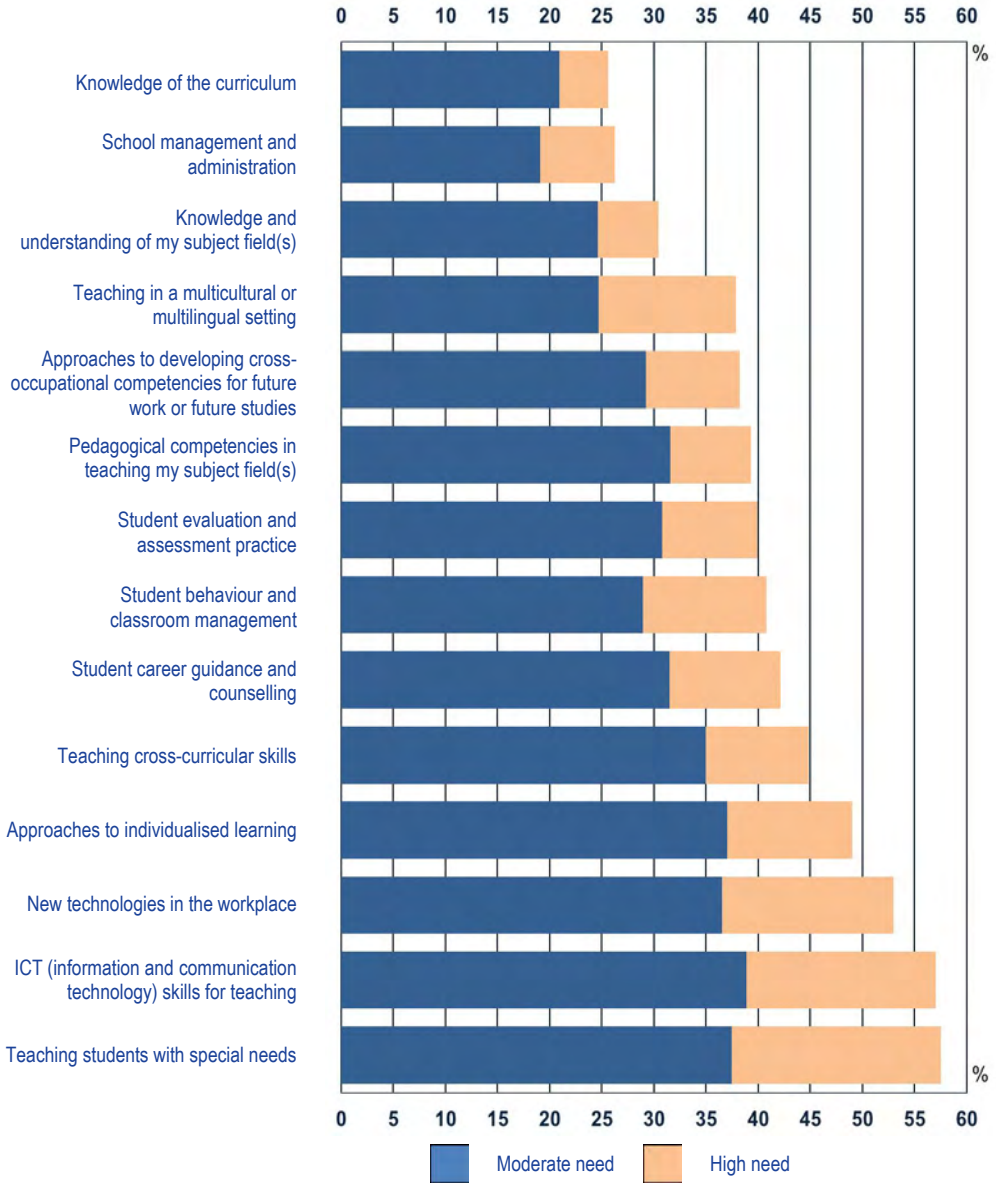
A scale of needs has been computed ranging from 'no need at all' in all areas, equal to zero, up to 'high level of need' in all areas, as listed in TALIS 2013, equal to 42 points. Needs are considered as 'low' from 0 to 14, 'moderate' from 15 to 28, and 'high' from 29 to 42 points.

Furthermore, when the foregoing data is analysed for policy-making purposes, the teacher population specific to each system should be taken into account. A large percentage of teachers in a particular age or experience group expressing high needs in CPD should be scaled to the teacher population of that group. In Bulgaria for example, teachers in the 40-49 age group account for 31.5 % (see Table 1.3 in the Appendix) of all teachers and express a needs level second only to that of teachers aged under 30 who however comprise 4.2 % of the teacher population. By contrast in Romania, teachers younger than 30 and those between 30 and 39 express the highest needs levels, and together represent over 50 % of all teachers.

3.1.2. Needs with respect to topics

Teachers in different groups by age and experience express needs in different areas. TALIS 2013 has identified the five areas or topics for which higher percentages of teachers have expressed the most need, namely 1) teaching students with special needs (see the Glossary for a definition of special needs); 2) ICT skills for teaching; 3) new technologies in the workplace; 4) student behaviour and classroom management; and 5) teaching in a multicultural or multilingual setting. In Europe too, these five topics are cited by the highest percentages of teachers who express ‘high need’ levels. If the corresponding data for teachers with ‘moderate need’ levels is added to that of the ‘high need’ group, the percentage demand for the first two topics is close to parity and the third position of ‘new technologies in the workplace' is firmly maintained, while there are changes in the hierarchy of the remaining topics for which higher percentages of teachers express a need. As Figure 3.3 shows, proportionally more teachers feel a need for 'approaches to individualised learning' and 'teaching cross-curricular skills', followed in 6th position by 'student career guidance and counselling'.

Figure 3.3: Proportion of teachers in lower secondary education (ISCED 2) expressing moderate and high professional development need levels, in relation to 14 topics, EU level, 2013



	Moderate need	High need
Knowledge of the curriculum	21.0	4.6
School management and administration	19.1	7.1
Knowledge and understanding of my subject field(s)	24.6	5.8
Teaching in a multicultural or multilingual setting	24.7	13.2
Approaches to developing cross-occupational competencies for future work or future studies	29.2	9.0
Pedagogical competencies in teaching my subject field(s)	31.5	7.7
Student evaluation and assessment practice	30.8	9.2
Student behaviour and classroom management	28.9	11.8
Student career guidance and counselling	31.5	10.7
Teaching cross-curricular skills	35.0	9.8
Approaches to individualised learning	37.1	11.9
New technologies in the workplace	36.6	16.4
ICT (information and communication technology) skills for teaching	38.9	18.1
Teaching students with special needs	37.5	20.1

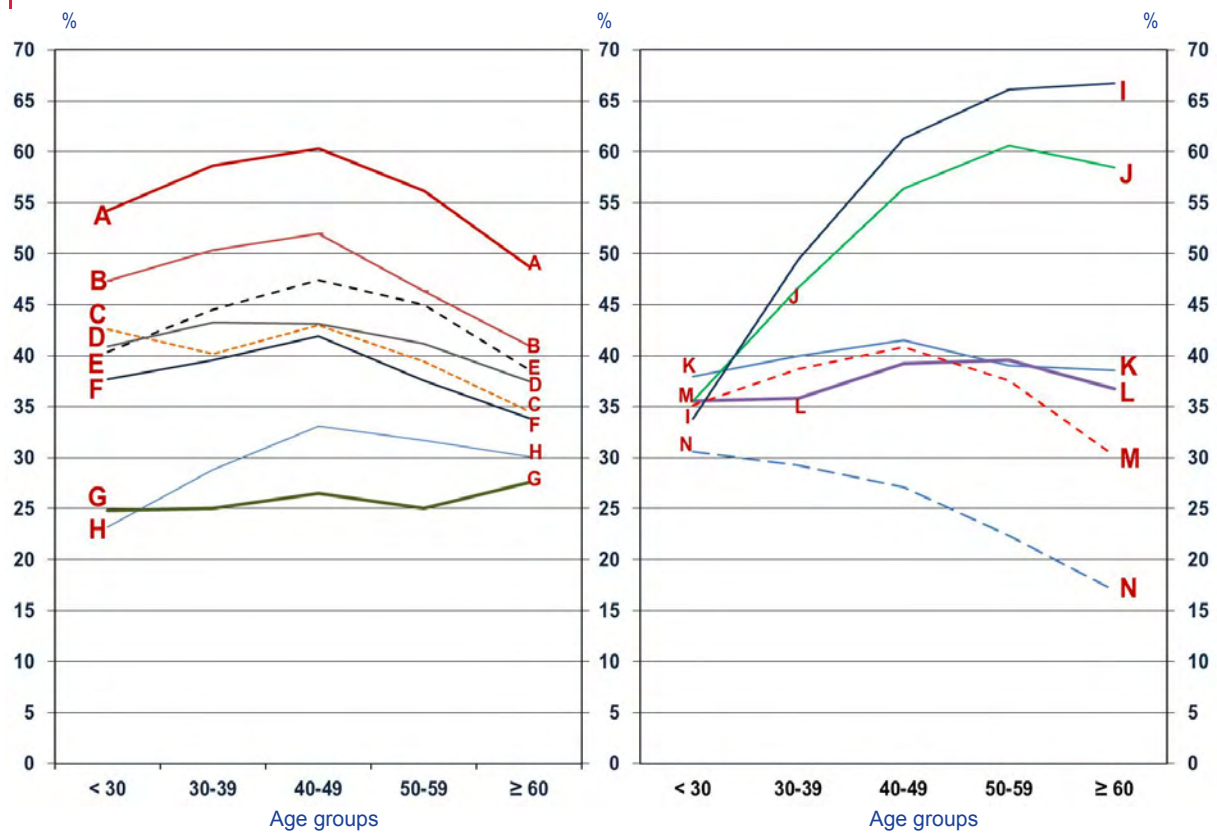
Source: Eurydice, on the basis of TALIS 2013 (see Table 3.4 in the Appendix, which includes data by country).

Explanatory note:

The topics are ranked in ascending order of the combined total percentages of teachers indicating 'moderate level of need' and 'high level of needs'.

The aggregated data on moderate and high need levels yields interesting findings when distributed by age group (see Figure 3.4). In the case of most topics considered individually, higher percentages of teachers in the 40-49 age group than those in any other, express moderate or high need levels, thus largely replicating the results for all 14 topics combined (shown in Figure 3.2). This does not apply to all topics. The relatively low percentage of teachers concerned by 'knowledge of the curriculum' varies little from one age group to the next, and 'school management and administration' displays a steadily downward trend indicating that the proportion of teachers aged 60 or over who express moderate or high need levels is only half of that applicable to the under 30 age group.

Figure 3.4: Proportion of teachers by age group in lower secondary education (ISCED 2) expressing moderate and high professional development need levels, in relation to 14 topics, EU level, 2013



A	Teaching students with special needs	**H**	Knowledge and understanding of my subject field(s)
B	Approaches to individualised learning	**I**	ICT (information and communication technology) skills for teaching
C	Student behaviour and classroom management	**J**	New technologies in the workplace
D	Student career guidance and counselling	**K**	Student evaluation and assessment practice
E	Teaching cross-curricular skills	**L**	Teaching in a multicultural or multilingual setting
F	Pedagogical competencies in teaching my subject field(s)	**M**	Approaches to developing cross-occupational competencies for future work or future studies
G	Knowledge of the curriculum	**N**	School management and administration

Source: Eurydice, on the basis of TALIS 2013 (Table 3.5 in the Appendix, which includes data by country).

Moreover, the teacher percentages for ‘student career guidance and counselling' and 'teaching in a multicultural or multilingual setting' also vary little from one age group to the next. Very similar proportions of teachers express moderate or high need levels in the case of both topics. In most topics, teachers aged 60 or over who express moderate and high need levels are proportionally fewer than in any other age group, reflecting a downward age-related trend. However, two important exceptions to this have to do with ICT. First, the percentage of teachers aged over 60 who express moderate and high need levels in 'ICT skills for teaching' is higher than in any other age group. The proportional difference between teachers aged under 30 and those slightly older in the 30-39 age group is 15 percentage points, which almost doubles for teachers aged 40-49. The percentage is fully doubled (with respect to the under 30 age group) by teachers in the 50-60 plus age groups. The second exception concerns the topic 'new technologies in the workplace' which exhibits a similar trend, though with a slightly downward turn among teachers aged over 60. This points to a generation gap that has yet to be bridged, with long-term implications for the mainstreaming of ICT in schools.

3.1.3. Needs with respect to school subjects taught

The foregoing hierarchy of needs expressed by teachers in different age groups is also reflected with respect to the school subjects they teach. The present analysis is limited to the five most represented subjects, namely 1) reading, writing and literature, 2) mathematics, 3) science, 4) social studies, and 5) modern foreign languages. The data reveals that there are negligible variations among teachers of these different subjects (see Tables 3.6.a to 3.6.e in the Appendix).

On average, nearly 60 % of teachers of the above five subjects report a moderate or high need level in the case of 'ICT skills for teaching' and 'teaching students with special needs', followed by 'new technologies in the workplace', 'approaches to individualised learning', and 'teaching cross-curricular skills'. In addition, the need seems to be experienced almost uniformly by all teachers, regardless of their subject. At the other end of the spectrum, the same uniformity is apparent in the case of subjects in which the lowest percentages of teachers have expressed moderate or high need levels, namely 'knowledge and understanding of my subject field(s)', 'knowledge of the curriculum', 'school management and administration', 'teaching in a multicultural or multilingual setting', and 'approaches to developing cross-occupational competencies for future work or future studies'.

3.1.4. Differences in needs across Europe

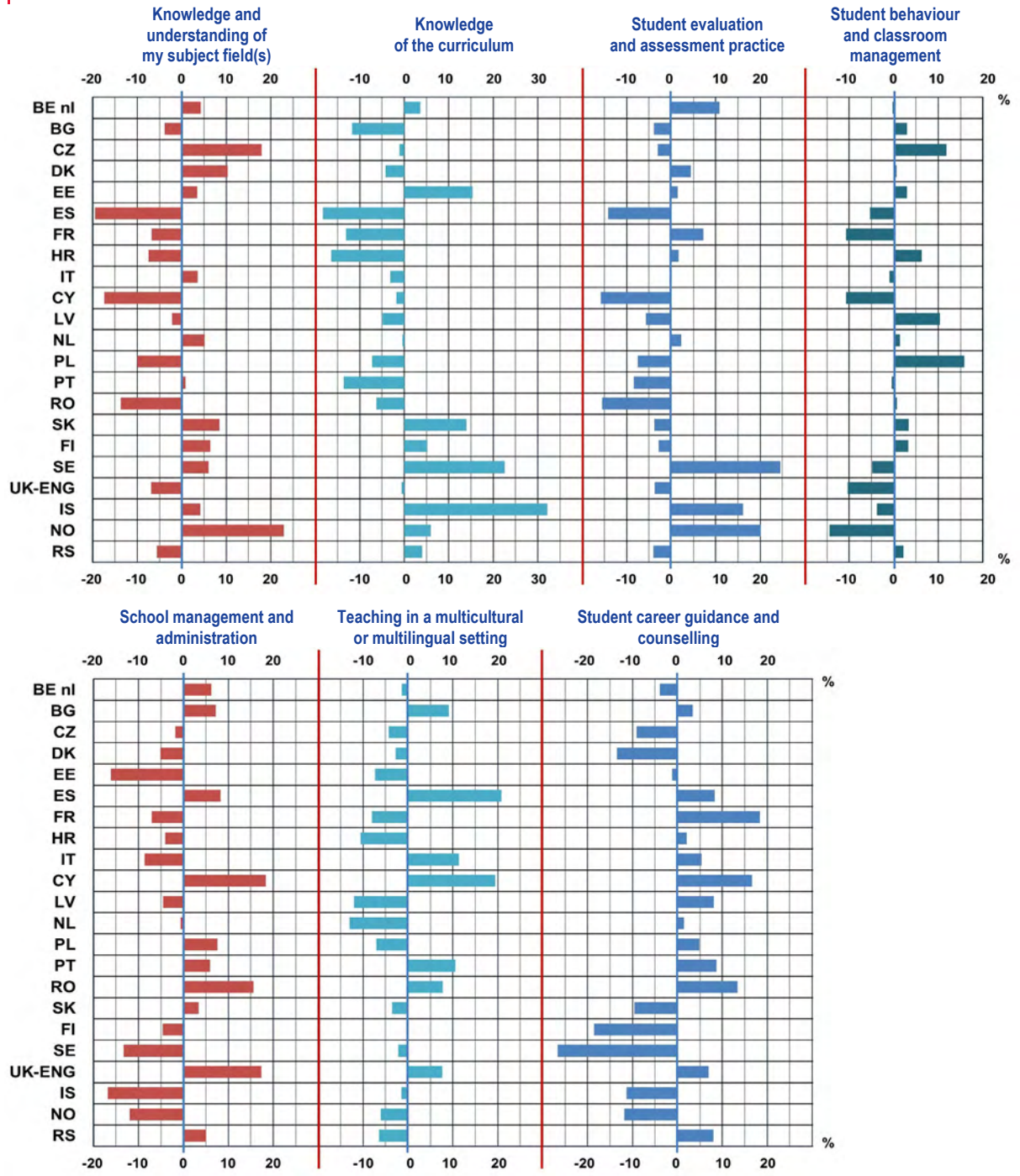
Teachers of all ages and at roughly all levels of experience, who teach a variety of subjects, all seem to confirm that the five topics discussed in section 3.1.2 are those for which needs are highest. In addition, the data for individual countries that took part in TALIS 2013 seems to suggest that these needs are fairly uniformly distributed in each of them. For each country and topic, Table 3.7 in the Appendix indicates the difference between the percentage of teachers actually expressing moderate or high need levels and the percentages expected to do so ([2]). It transpires that, in the case of many topics, teachers express very similar levels of need, suggesting that the foregoing needs hierarchy is broadly common to all European countries, with few marked deviations. Although not one of the five highest needs, 'pedagogical competencies in teaching my subject field(s)', is also uniformly distributed throughout Europe, with Cypriot and Polish teachers expressing less need and Norwegian teachers more. Given that nearly 40 % of teachers in Europe express a moderate or high level of need (see Figure 3.3), its uniformity from one country, age group, and subject taught to the next needs to be considered carefully.

The needs expressed in relation to other topics appear far less uniform (see Figure 3.5). 'Teaching in a multicultural environment or multilingual setting' is cited more often in Spain (20.8 %), Italy (11.3 %), Cyprus (19.4 %) and Portugal (10.6 %), possibly because of the current exposure of these countries to migrant flows, while it is felt to be less essential in Croatia (-10.6 %), Latvia (-12 %), and the Netherlands (-13 %).

Teachers in Sweden and Iceland tend to express moderate and high levels of need in 'knowledge of the curriculum' (22.6 % and 32.2 % respectively) more than in the case of other countries and other topics, and also in 'student evaluation and assessment practice' (24.5 % and 16.2 % respectively). As regards the latter topic, they are joined by their counterparts in Norway (at 20.1 %). The needs of teachers in France seem conform to European averages, except in the case of 'student career guidance and counselling' for which 18.4 % more teachers than expected expressed moderate or high need levels. At the other extreme are teachers in Finland and Sweden for whom 'student career guidance and counselling' seems to occupy a far less important position (-18.6 % and -26.7 % respectively).

([2]) The expected percentage is calculated on the basis of the means of each single country, all subjects confounded, and from the means of each subject, all countries confounded.

Figure 3.5: Topics with the largest differences between the proportions of teachers in lower secondary education (ISCED 2) who expressed moderate and high professional development need levels, and the proportions expected to do so, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.7 in the Appendix)

Explanatory note

Needs are regarded as broadly the same across Europe, when no more than five countries have reported a difference of higher than 10 % or -10 % between the proportion of teachers who actually expressed needs and the proportion of those expected to do so.

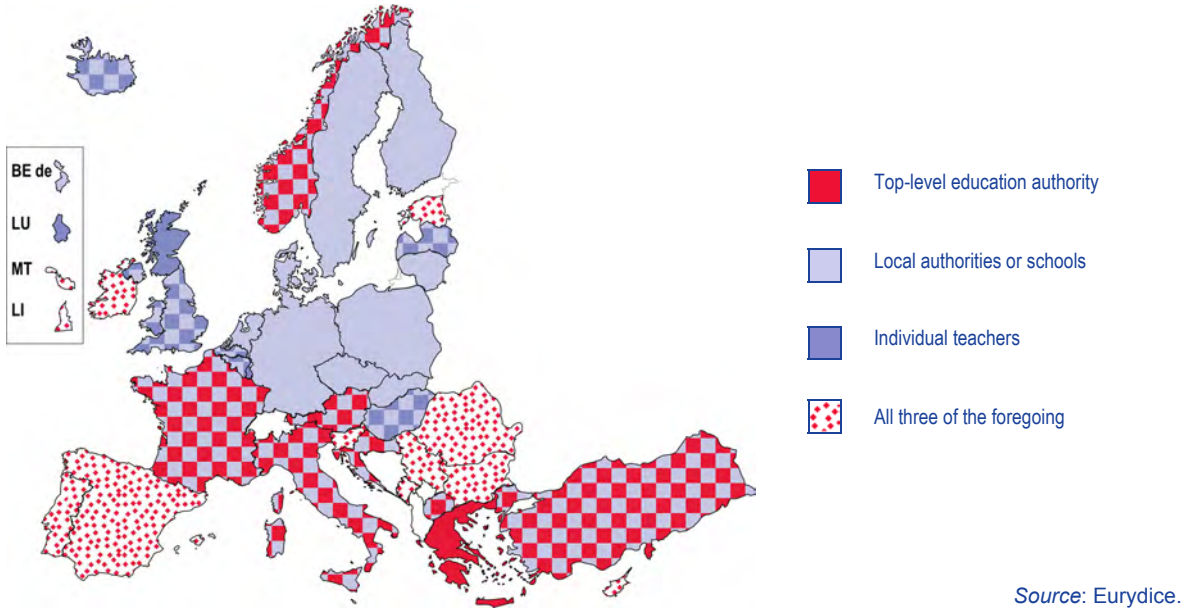
To sum up, the topics for which large proportions of teachers have expressed moderate or high need levels seem to reflect their desire for teaching methods, materials, equipment, and skills enabling them to approach classroom learning in a way that is more personalised, effective, modern, diversified, and cross-disciplinary, rather than professional development activities linked to their subject matter. 'ICT

skills for teaching' and 'new technologies in the workplace' go hand-in-hand with 'approaches to individualised learning' and 'teaching cross-curricular skills'. This observation, together with the relatively low position occupied by 'knowledge and understanding of my subject field(s)', and 'knowledge of the curriculum', suggest that teachers consider themselves competent in relation to their school subject and its content, but need training that strengthens their teaching techniques (see also Chapter 2, section 2.1.4). This priority in turn seems to indicate that they are already aware of the paradigm shift of what quality means in education today. They have stated clearly their need for resources enabling them to transfer their prime focus from theory to the classroom itself, and to devote more effort to helping students control their own learning while teaching them in accordance with modern methods relevant to their individual requirements.

3.1.5. Defining needs

But who defines the CPD needs of teachers in the first place? In Europe, three main players might be involved: (1) the top-level authority for education (usually the national ministry of education); (2) local education authorities or schools themselves; or (3) individual teachers. As shown in Figure 3.6, the responsibility is shared in the majority of education systems, with few exceptions. In Greece, for example, the top-level education authority is alone in determining the kind of training teachers need, and those allowed to provide it. In 10 education systems – those of Belgium (German-speaking Community), the Czech Republic, Denmark, Germany, Lithuania, the Netherlands, Poland, Slovakia, Finland, and Sweden – the needs and training plan are established only locally or by schools, although consultation with various interests, including teachers, is usually involved. In Germany, in-service training institutions and advisers from school supervisory authorities help to prepare, implement and evaluate in-service training. In Lithuania, training needs are normally established through a consultation process involving teachers, internal and external evaluation recommendations, and the opinion of various school stakeholders. In Slovakia, school heads decide which professional development activities have priority, with due regard for the educational practice and environment of their schools, and after consulting teachers on their individual needs.

Figure 3.6: Players who determine CPD needs and training plans for teachers in lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

Luxembourg and the United Kingdom (Scotland) are the only education systems in which the training plan is primarily the responsibility of individual teachers, although such needs are discussed and agreed with the line manager.

In all other education systems, different players actively help establish CPD needs and the training plan. In France, Croatia, Italy, Austria, Norway, the former Yugoslav Republic of Macedonia, and Turkey, both the top-level education authority and the local authorities or schools define training needs.

In **France**, every single year, the Ministry of Education develops a National Training Programme (*Programme National de Formation* – PNF) which provides the general framework for the development of training plans by administrative units called *académies* (Plans Académiques de Formation – PAF).

In **Italy**, CPD needs and plans are determined by schools themselves. However, the top-level authority intervenes when training is linked to reforms or innovation.

In **Norway**, a national CPD plan is developed in cooperation between the Association of Local and Regional Authorities, the three teacher unions, the Association of School Leaders, the National Council for Teachers' Education, and the Ministry of Education and Research. At local level, the authorities are responsible for identifying the needs of teachers and preparing a competence development plan for them jointly with the local employees association.

In Belgium (French and Flemish Communities), Latvia, Hungary, the United Kingdom (England, Wales, and Northern Ireland), and Iceland, training needs are established by the local authorities and schools, together with individual teachers. In the United Kingdom (England, Wales, and Northern Ireland), the professional development plan of individual teachers has to be linked and contribute to the school development plan.

In the remaining education systems (Bulgaria, Estonia, Ireland, Spain, Cyprus, Malta, Portugal, Romania, Slovenia, Liechtenstein, Montenegro, and Serbia), all the foregoing players apparently help to determine the CPD training needs and plan. In most cases, the top-level authorities provide a general framework for the foremost priorities in their education systems as a whole, while teachers draw up plans based on their individual needs. The local authorities and schools then merge both elements within the context of the school development plan.

In **Bulgaria** and **Ireland**, the professional development plan is prepared at school level. It is based on the needs expressed by individual teachers and nationwide campaigns launched by the Ministry of Education in response to common needs or, in the case of Ireland, to educational priorities such as curricular change, literacy and numeracy improvement, or child protection.

In **Spain**, the education authorities devise territorial CPD plans to establish training priorities which are then incorporated in the CPD plans of teachers, though with differences depending on the Autonomous Community concerned. However, the territorial plans are developed with due regard for the demands expressed by schools and individuals, which are gathered by the training and resource centres. The needs of teachers are also taken into account, either on their own initiative, as in the case of specific training needs, or through the action of school CPD coordinators who usually inform the training and resource centres.

In **Portugal**, the school association training centres are very much involved, with each public-sector school linked to the centre in their region. These centres record individual and school professional development plans and needs, and provide training either directly or in association with higher education institutions. In addition, the Ministry of Education may establish protocols with teacher education institutions or other bodies to implement specific plans for priority areas.

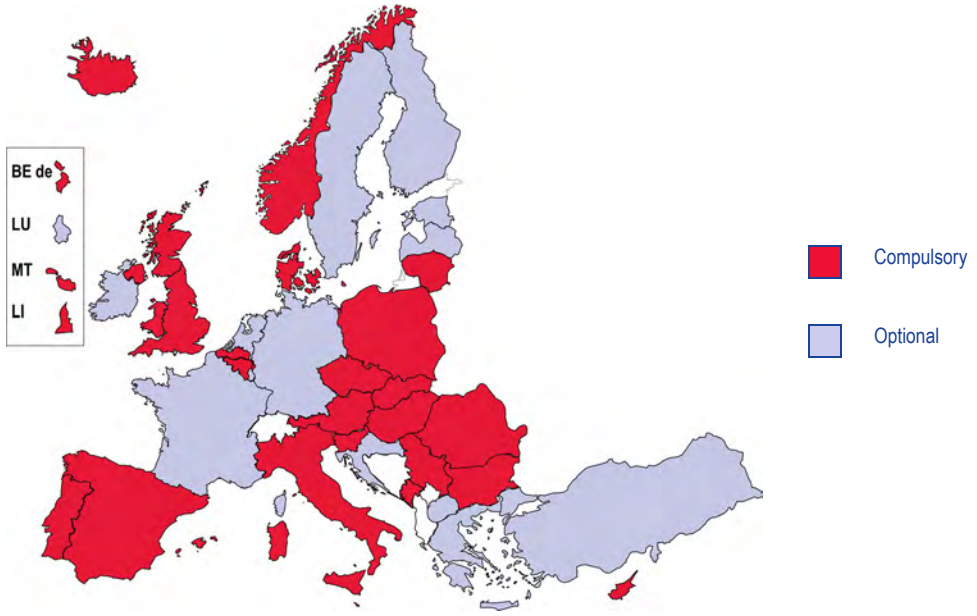
In **Slovenia**, schools plan CPD for their teachers in the annual work plan, although the latter enjoy significant freedom in establishing their training needs. Furthermore, the Ministry of Education establishes needs for the education system as a whole. Teachers receive points for training within these national priority areas, which they can record for promotion purposes. Schools also establish compulsory forms of training for their teachers.

Interestingly, overall needs in each country, as shown in Figure 3.1, appear to correlate with action by the top-level education authorities in defining them (r=0.58). The country level correlation depends on the fact that these authorities are part of the needs definition process, and not on the nature or quality

of their role in it. As already noted, the top-level authorities in some countries determine the strategic thrust of CPD for teachers, while in others their intervention is limited to areas of reform. The correlation might imply that the general direction or mandatory areas of CPD as laid down by these authorities differ from the needs perceived by teachers. In fact, there is a fairly high country level correlation between the involvement of the top-level authorities and some of the topics for which teachers have expressed most need, such as 'teaching students with special needs' (r=0.65), 'teaching cross-curricular skills' (r=0.52), 'new technologies in the workplace' (r=0.41) and 'student career guidance and counselling' (r=0.82). However, the country level correlation, whether negative or positive, is absent when schools or teachers are considered either individually or in combination, as players determining CPD needs. This might imply that the mere adoption of more bottom-up approaches does not necessarily lead to having a better perception of needs. It might however also imply that the procedures and scope of top-level interventions need to be fine-tuned.

Whatever the combination of the players involved in establishing CPD needs, schools always seem to be part of the equation (except in Greece), either through merging the interests and wishes of individual teachers into a more general school development plan, or by combining those needs with more general interests of the school itself or its education authority. In fact, as shown in Figure 3.7, it is compulsory to have CPD plans in place at school level in over two-thirds of the education systems considered.

Figure 3.7: Status of the CPD plan at school level for teachers in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

Country-specific note

Spain: The Figure shows the situation in most Autonomous Communities.

In those countries in which a formal CPD plan is compulsory, developing it in practice may be the responsibility of the following: the school head, as in Bulgaria, the Czech Republic, Cyprus, Hungary, Austria, Poland, Slovakia, and Slovenia; the school management team or board, as in Belgium (Flemish Community), Lithuania, Malta, and Serbia; the education or teaching council, as in Belgium (German-speaking Community), Portugal, and Romania; a particular teacher appointed to coordinate CPD activities at the school, as in most Autonomous Communities in Spain, and Montenegro; or individual teachers, as in the United Kingdom. In Belgium (French Community), the school head

prepares the school CPD plan, while individual teachers are asked to prepare their own CPD plan in line with the one devised for the school.

Throughout Europe, the CPD plan usually forms part of the annual school work plan or development plan, although a few education systems require it to be a separate unrelated document.

In some education systems, adoption of the CPD plan is a collective responsibility assumed by all teaching staff. For example, in Belgium (Flemish Community), the plan needs to be approved by the local committee comprising representatives of the school governing board and staff or – in its absence – by the general staff meeting. In Italy, the CPD plan has to be approved by the entire teacher assembly. In the Czech Republic, it is established following negotiations with a relevant trade union body, and must take into account the interests of teachers as well as the needs and budget of schools. In Hungary, the plan is adopted by the maintainer of the school, after consultation with all his teaching staff.

In most cases, CPD plans are issued annually. However, in some countries, they may be updated less frequently – for example, once every two years in Portugal and Montenegro. In Poland, school heads prepare long-term CPD plans for their teachers with due regard for the school development plan, including general staff needs, the plans of individual teachers, and applications by teachers for CPD funding.

As far as the content of CPD plans is concerned, Montenegro prescribes certain elements for inclusion in them. They include general priorities linked to the school development plan, specific and operational goals, activities, target groups, the timing involved, responsibilities, and indicators for monitoring implementation of the plan.

In some education systems, CPD plans are important elements in the evaluation of teachers. Such is the case in Poland, for example, where the individual plans of teachers are approved by their school heads and are among the elements taken into account during the appraisal exercise. In the United Kingdom (England, Wales, and Northern Ireland), the CPD of individual teachers is regarded as one of the means by which staff can attempt to achieve the performance aims and standards specified in school appraisal policies. Evaluation is also an important element in teacher CPD plans in Serbia. Here, however, the plan itself is developed with due regard for the evaluation of teachers as just one of several elements, including student and parent opinions about the school work of teachers, their own self-evaluation, the school priorities and development plan, and standards prescribed by the Ministry of Education, Science and Technological Development.

In 13 education systems, CPD plans at school level are not compulsory. However, different procedures for ensuring transparency or guaranteeing the provision of CPD are in place.

In the **Netherlands**, school boards are responsible for their personnel policies and are entirely free to establish the CPD activities needed in schools. Since February 2012, a register promoted by the *Onderwijscoöperatie* (Education Cooperative) has been available to teachers for voluntary use. Valid for four years, it amasses information on their skills, in order to help them demonstrate their qualifications and abilities, and show that they systematically update their professional record. This register will be incorporated in educational legislation, and registration will be compulsory for all teachers in primary, secondary and vocational education as of 2017.

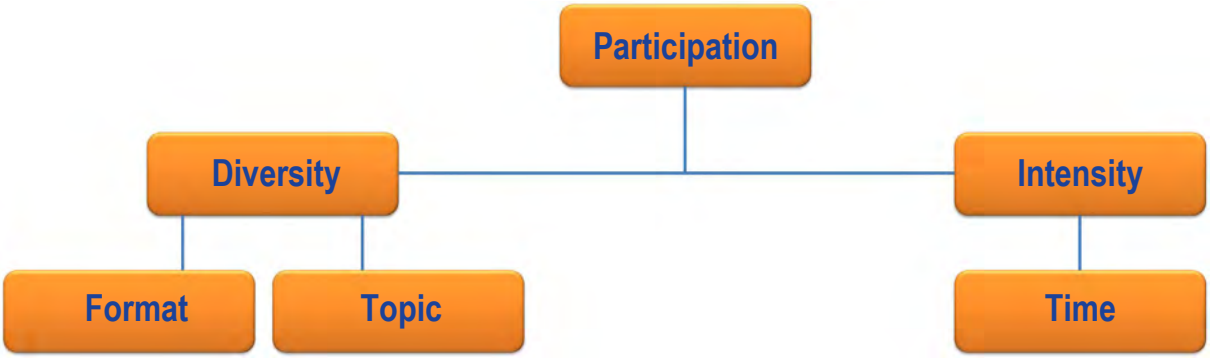
Although the CPD plan is not compulsory in **Sweden**, the education provider (the municipality or a private body) must ensure that staff has opportunities for professional development.

Although in the **United Kingdom (Scotland)**, the CPD plan is compulsory, a similar approach has been adopted since 2014, with the introduction of a professional update system for teachers. Under this measure, their involvement in career-long professional learning (CLPL), the maintenance of an individual CLPL record and a 'signing off' once every five years by a line manager, are now conditions for remaining registered with the General Teaching Council for Scotland (GTCS).

3.2. Participation

The TALIS 2013 report (OECD, 2014) considers participation in terms of two indicators, namely the diversity of professional development activities undertaken by teachers in the 12 months prior to the survey, and the intensity of their participation. The latter refers to the time they spend in professional development activities, while the former may refer to the various kinds of activities undertaken, from formal structured workshops and courses to less structured participation in networks of teachers. In this discussion, the question of diversity will also be considered with regard to the topics that such activities address.

Figure 3.8: Indicators used to examine participation in professional development, 2013

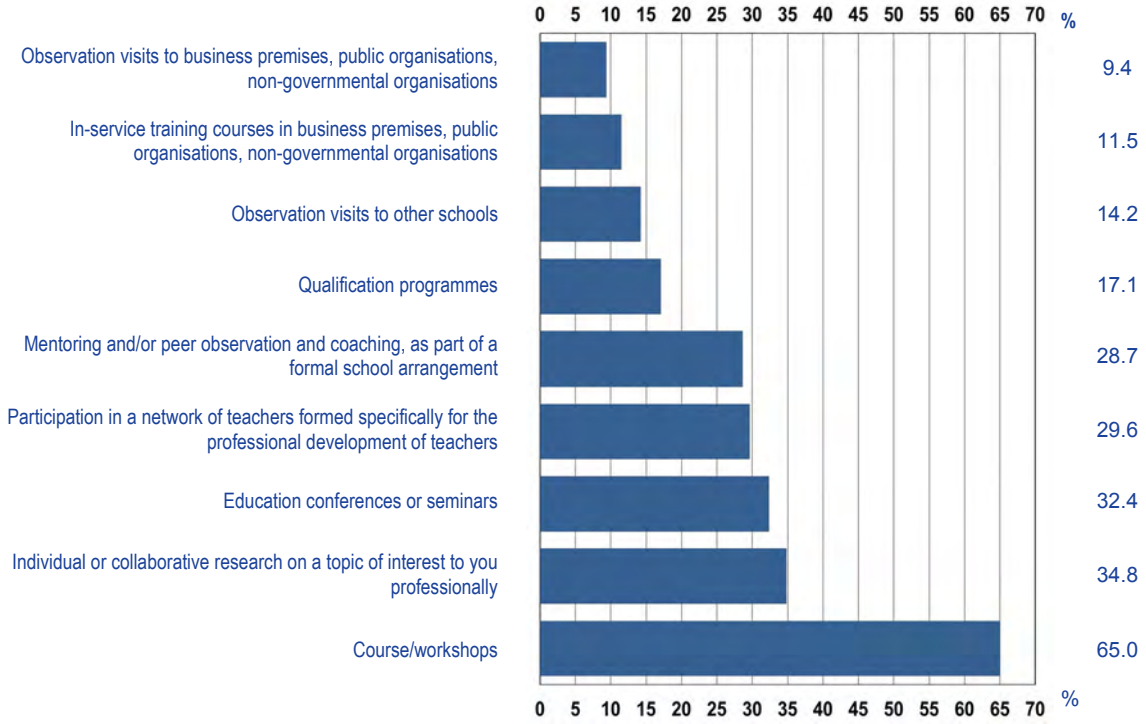


Source: Eurydice.

3.2.1. Diversity: format and topics

As far as the first component of diversity is concerned, the TALIS 2013 data shows that 65 % of teachers said they had taken part in the more formal and structured types of professional development activities which involved 'courses or workshops', followed at a distance by 'individual or collaborative research' and 'education conferences or seminars' (see Figure 3.9). Networks of teachers established specifically for professional development activity are its fourth most common format, providing for CPD that is more peer-based, collaborative, less structured, bottom-up, and possibly supported by ICT. Also noteworthy is that visits to observe other schools, or business premises, public organisations or non-governmental organisations (NGOs) lagged far behind. Less than one teacher in five claimed to have visited schools and just under one in 10, the last three types of body. Similarly in-service training courses are seldom available to teachers. Yet there are opportunities to diversify the format of activities and enlarge approaches to professional development. This is even more apparent in the case of individual countries (see Table 3.8 in the Appendix) in which there can be marked deviations from the EU average. In Slovakia, for example, the professional development activity with the highest participation rate is 'mentoring, peer observation, and coaching'. In Estonia, Romania, and Iceland, over 50 % of teachers said they had taken part in a 'network of teachers formed specifically for the professional development of teachers' while, in Croatia, the percentage reached 62.6. In Bulgaria, almost 50 % of teachers said that they were involved in a 'qualification programme'. 'Observation visits to business premises, public organisations, non-governmental organisations' were very popular in Portugal (39.1 %), while in Latvia and Iceland over 50 % of teachers reported taking part in 'observation visits to other schools'.

Figure 3.9: Proportion of teachers in lower secondary education (ISCED 2) who have followed different types of professional development activities in the 12 month previous to the survey, EU level, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.8 in the Appendix, which includes data by country).

Explanatory note

The categories are ranked in ascending order of total percentages of teachers who said they had taken part in one of the professional development activities listed.

This diversity gives education systems the opportunity to learn from each other both in terms of practices, and of the policies and regulations that bring different forms of professional development and approaches to it into being. Although there are few country level correlations between the format of professional development activities and decision-making on needs, it is noteworthy that there are positive correlations between the involvement of teachers in defining their needs, as shown in Figure 3.6, and participation in 'observation visits to other schools' (r=0.57) and 'in-service training courses in business premises, public organisations, non-governmental organisations' (r=0.49). Similarly, the intervention of top-level education authorities in needs definition correlates positively with 'individual or collaborative research on a topic of interest' (r=0.52).

The types of professional activities on which teachers have embarked are of course just one element among several that should be taken into account. The second component of diversity is the topics or content addressed in CPD. The analysis shows that teachers in the EU have been exposed, on average, to five different topics out of the 14 listed in TALIS 2013. As shown in Table 3.9 in the Appendix, teachers in Estonia, Croatia, Latvia, and Romania are well above the EU average, while teachers in Belgium (Flemish Community), Denmark, and France are among those reporting the lowest levels of exposure. Before considering this second element further, with reference specifically to the content addressed in CPD (see Section 3.3), it is worth discussing the question of intensity, which provides a clearer overview of participation of teachers in CPD from one country to the next.

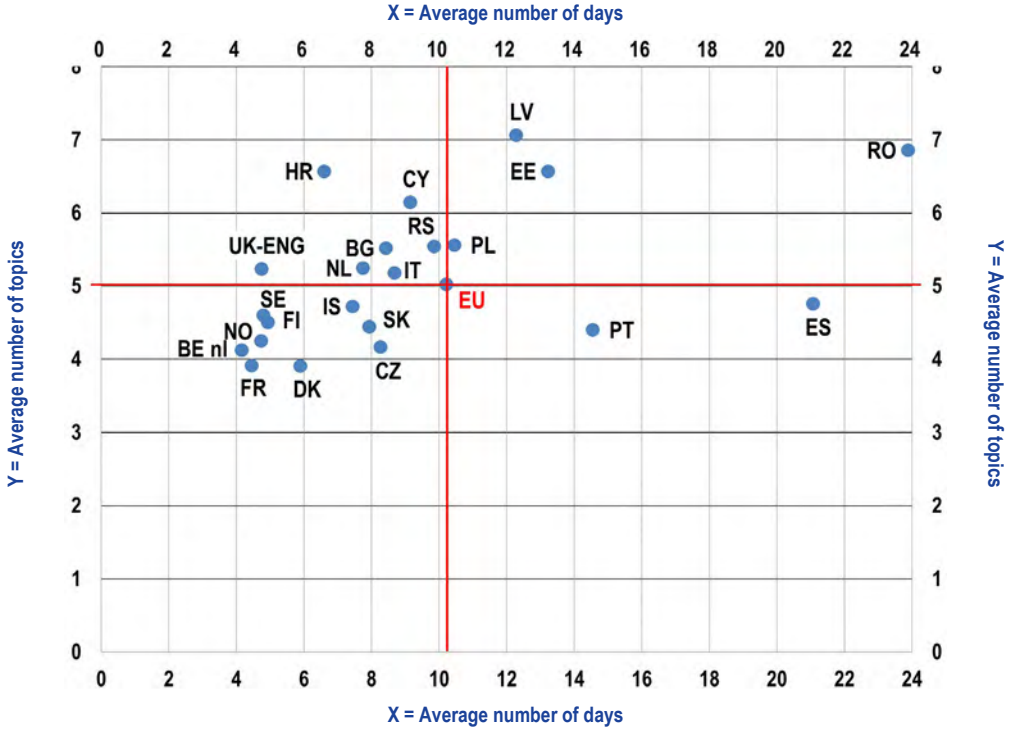
3.2.2. Intensity and the time factor

The measurement of intensity is clearly conditioned by the format of the activity concerned. A qualification programme taken at a slower pace can last months or even years, while a course or workshop may be over in just half a day. Furthermore, not all forms of professional development activity are readily quantifiable in terms of their duration. While conferences and seminars usually last for an easily measurable period (expressed most often in hours, days or parts of days), such measurement is less easy to apply to mentoring, peer observation and coaching, and may be little more than an approximation. For example, participation in networks of teachers formed specifically for professional development may involve asynchronous communication making its measurement elusive. In the TALIS 2013 questionnaire, teachers were asked to state how many days were devoted to the more structured and quantifiable forms of professional development activity, including courses and workshops, observation visits, or in-service training courses.

One should not assume, of course, that the number of days devoted to CPD corresponds to the number of courses taken or the number of topics involved. More than one topic may well have been covered in a single professional development activity lasting just a day or, conversely, a single topic may have entailed several activities spread over many days.

By relating the average number of days which are spent on professional development activities in each country, and the average number of topics reportedly covered in such activities, it is possible to gauge more accurately the scale of the professional development to which teachers are exposed.

Figure 3.10: Participation of teachers in lower secondary education (ISCED 2) calculated with reference to the average number of topics covered by professional development activities and the mean number of days spent on such activities during the 12 months prior to the survey, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Tables 3.9 and 3.10 in the Appendix).

Explanatory note

In addition to the mean number of days shown in Figure 3.10, Table 3.10 in the Appendix also contains the values of the median number of days at EU level and for each country. Spain and Romania stand out with a median of 10 and 11 days respectively, followed by Estonia and Latvia. On the other hand, the median in Belgium (Flemish Community) is half the value of the European one.

Figure 3.10 shows the relation between intensity, which is based on the average number of days devoted to more structured professional development activities, and diversity, considered here in terms of the average number of topics addressed in these activities. As explained above, the concept of intensity does not incorporate the total number of days spent on the activities, as the information is not requested in TALIS 2013 for all types of activity. Nevertheless, the calculation still helps to estimate the time devoted to CPD in each country. The four quadrants in the diagram exhibit divergences from the EU average. Most countries are in the two left-hand quadrants, with a model based on a lower-than-average number of days spent on CPD. However, in nine countries, namely Belgium (Flemish Community), the Czech Republic, France, Slovakia, and the Nordic countries, a below average number of days also corresponds to a below average number of topics, while in seven countries – Bulgaria, Croatia, Italy, Cyprus, the Netherlands, the United Kingdom (England), and Serbia – a below average number of days is offset by an above average number of topics. In this latter case, therefore, it is possible that the model is based on relatively short CPD activities. Six countries are on the right-hand side of the diagram with an above average number of days devoted to professional development activities. However, while four of them (Estonia, Latvia, Poland, and Romania) have an above average number of topics, two of them (Spain and Portugal) spend an above average number of days on fewer topics.

This data should be related to the diversity and degree of needs expressed by teachers. A diversity of needs can encourage policies to enlarge access to professional development activities which cover a greater variety of topics, while high levels of need in fewer areas can further activities concentrated on specific topics to each of which more time is devoted. Portugal, for example has a below average number of topics covered in an above average number of days spent on CPD. Yet the TALIS 2013 data shows that, in eight out of 14 topics, 50-60 % of teachers express moderate and high levels of need (see Table 3.4 in the Appendix), and that in the case of one of them, namely 'teaching students with special needs', the percentage reaches 76 %. In Portugal, therefore, exposure to a greater variety of topics might be beneficial. By contrast, Bulgaria has relatively fewer topics with very high percentages of teachers expressing high or moderate needs. Yet it also has an above average number of topics covered in a less-than-average number of days. In Bulgaria, a better balance in terms of more days to concentrate on fewer topics might help to lessen the acuteness of needs in particular areas. In Italy, both the acuteness and diversity of needs is alarming. Between 60 and 70 % of teachers express moderate or high need levels in seven out of the 14 topics, while in the case of three more topics the corresponding percentage is 70 or above. Italy has a below average number of days spent on a slightly higher-than-average number of topics. Nevertheless, this is apparently not enough to address the demand for CPD expressed by Italian teachers. Countries might therefore profitably analyse this data in conjunction with teacher perceptions of their needs, so as to determine the optimal combination of variables to suit the particular circumstances concerned.

3.2.3. Status of CPD

A further matter apparently related to the intensity and, to some extent, the diversity of CPD for teachers is how CPD is framed in national legislation.

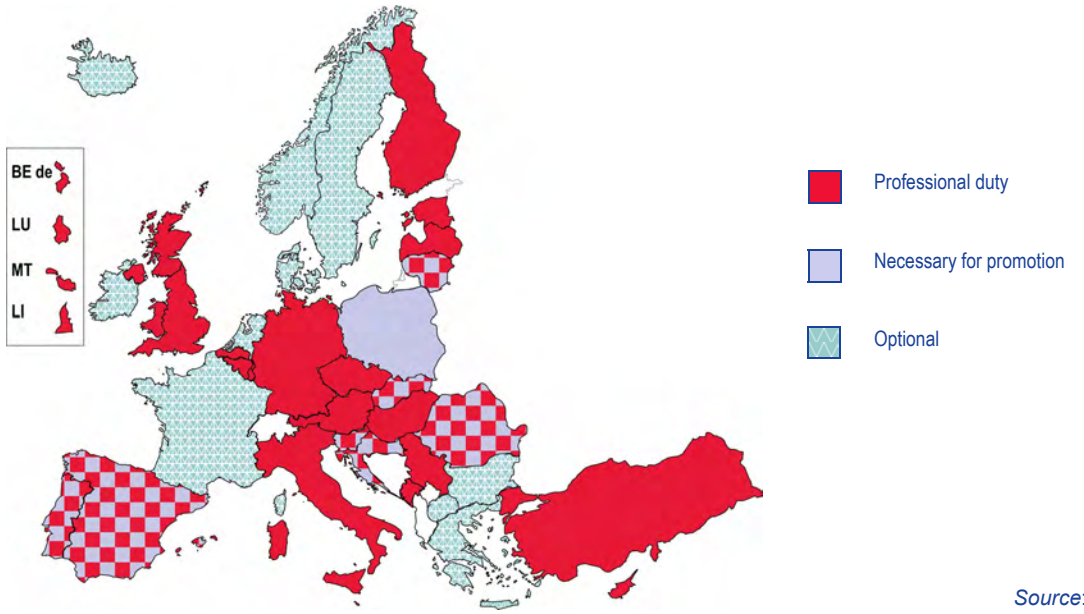
Broadly speaking, CPD in Europe may be viewed, first, as a professional duty, secondly as necessary for promotion, thirdly as both of these and, finally, as an optional activity.

As shown in Figure 3.11, CPD is a professional duty in 29 education systems.

The professional duty is usually referred to in legislation on the teaching profession, or specified in teacher employment contracts or collective agreements. Among the systems to which this applies, ten stipulate the minimum number of hours that each teacher is expected to devote annually to CPD

(those in Estonia, Cyprus, Latvia, Luxembourg, Hungary, Malta, Austria, Portugal, Montenegro, and Serbia). This ranges from eight hours a year in Luxembourg to 68 hours in Serbia. In five systems, the minimum is expressed as a number of days, with in this case less marked variations. Teachers in Belgium (French Community) and Finland are expected to take part in CPD for at least three days a year, while in Cyprus this minimum is four and, in Lithuania and Slovenia, five. In ten systems in which CPD is considered a professional duty, no minimum number of hours or days is specified. In the United Kingdom (Scotland), teachers have a contractual requirement to complete a maximum of 35 hours of CPD annually, and as part of their working year must also attend five days of development activity planned by their employer. Although CPD is considered a professional duty in Belgium (Flemish Community), training activities cannot be mandatory unless the school head or school board deem it necessary for individual teachers.

Figure 3.11: Status of CPD for teachers in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

Minimum time to be allocated annually to CPD, as stipulated in legislation or employment contracts

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU	HU
In hours	⊗	⊗	⊗	⊗	⊗	⊗	⊗	32	⊗	⊗	⊗	20	⊗	⊗	14	12	⊗	8	13
In days	3	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	4	⊗	5	⊗	⊗
	MT	**NL**	**AT**	**PL**	**PT**	**RO**	**SI**	**SK**	**FI**	**SE**	**UK (1)**	**UK-SCT**	**IS**	**LI**	**NO**	**TR**	**MK**	**ME**	**RS**
In hours	18	⊗	15	⊗	25/50	⊗	⊗	⊗	⊗	⊗	⊗	⊗	170-190	⊗	⊗	⊗	⊗	5	68
In days	⊗	⊗	⊗	⊗	⊗	⊗	5	⊗	3	⊗	⊗	5	⊗	⊗	⊗	⊗	⊗	⊗	⊗

Source: Eurydice. ⊗ No minimum UK (1) = UK-ENG/WLS/NIR

Explanatory note

Professional duty means a task described as such in working regulations, contracts, legislation or other regulations on the teaching profession.

Country-specific notes

France, United Kingdom (Scotland) and **Iceland**: Values express minimum or maximum rights to CPD, or a recommended minimum.
Cyprus: The minimum commitment to CPD is specified as 14 hours to be completed in four days.
Latvia: The minimum commitment to CPD is specified as 36 hours in three years.
Hungary: The minimum commitment to CPD is specified as 90 hours in seven years (120 periods of 45 minutes).
Slovenia: The minimum commitment to CPD is specified as five days in one year or 15 days in three years.
Montenegro: The minimum commitment to CPD is specified as 24 hours in five years.

In several countries in which CPD is regarded as a professional duty, involvement in it is further encouraged by making it necessary for promotion. In Spain, Croatia, Lithuania, Portugal, Romania, Slovenia, and Slovakia, CPD is both a duty and a prerequisite for career advancement and salary increases. Even if in most education systems, CPD is not explicitly required for promotion, it is considered an important advantage.

Poland is the only country in which CPD is exclusively linked to promotion, as the appraisal and career development of individual teachers takes into account the extent to which they have fulfilled a previously agreed professional development plan. Teachers are nevertheless committed to improving their general and professional knowledge under the Teachers' Charter.

In Bulgaria, Denmark, Ireland, Greece, France, the Netherlands, Sweden, Iceland, and Norway, the involvement of teachers in CPD is not stated in terms of professional duty or directly linked to promotion mechanisms. Although in Iceland CPD is an option and not a professional duty, teachers are recommended to engage in 170-190 hours of CPD annually. In France, participation in CPD is regarded as a right and the legislation specifies that teachers are entitled to at least 20 hours a year.

In the **Netherlands**, as from 1st August 2014, the collective agreement for secondary teachers, signed by the social partners, envisages a yearly budget of EUR 600 per teacher, and a right to 83 hours for professional development and training.

The data provided in Figure 3.10 and the status of CPD as shown in Figure 3.11 correlate in two ways: there is a negative correlation (r=-0.47) between the number of days and CPD regarded as optional; and a positive correlation (r=0.48) between the number of days and CPD viewed as both a professional duty and a necessity for promotion. In fact, in countries in which CPD is optional, the average number of days devoted to it is below the EU average and, with the exception of Bulgaria and the Netherlands, also below the EU average number of topics. As training in Belgium (Flemish Community) only becomes mandatory where the school head or school board deem it necessary, it may also be regarded as belonging to this group. By contrast, in four countries out of the six in which CPD is viewed both as a professional duty and a necessity for promotion, the intensity of participation is well above the EU average (Spain, Latvia, Portugal, and Romania).

3.3. Aligning participation and needs

Professional development activities clearly cover precise content and topics. But do they correspond to the content and topics for which teachers have expressed moderate or high levels of need? As shown in Table 3.11 in the Appendix, 'knowledge and understanding of my subject field(s)' and 'pedagogical competencies in teaching my subject field(s)' stand out as the two topics most covered in professional development activities. Among the five topics in which training was felt to be most needed, as explained in section 3.1, 'ICT skills for teaching' was also covered, with over 50 % of teachers including it in their professional development work. While 'approaches to individualised learning' and 'new technologies in the workplace' are the sixth and seventh most covered topics, under 40 % of teachers were involved in activity related to either. Somewhat troublingly, 'teaching cross-curricular skills' and 'teaching students with special needs' come ninth and tenth in coverage, with just over one-third of teachers involved in professional development activities covering these two topics.

The demand for topics among teachers seems partly to depend on their age (see Table 3.12 in the Appendix). However, the pattern observed under needs (see Figure 3.2) is not reflected uniformly here. While the needs level seems to fall steadily in all topics, with the exception of ICT-related training, they fall into three different groups in terms of participation.

First come topics in which older teachers are less involved than younger ones, such as 'knowledge and understanding of my subject field(s)', 'pedagogical competencies in teaching my subject', and 'school management and administration'.

The second group consists of topics covered in very similar ways from one age group to the next. They include 'approaches to developing cross-occupational competencies for future work or future studies', 'teaching in a multicultural or multilingual setting', and 'teaching cross-curricular skills'.

The final group comprises topics in which patterns of participation specifically by age group are less uniform. In this group, for example, 'student career guidance and counselling' appears to be more common among older teachers than younger ones; 'ICT skills for teaching' and 'new technologies in the workplace' both reflect changes in needs and involve higher proportions of teachers in mid-career or at the end of their careers, than in the case of the youngest teachers; 'knowledge of the curriculum' and 'student evaluation and assessment' exhibit high proportions of young teachers and those at the end of their career, but lower rates among those in mid-career; finally, as regards 'approaches to individualised learning', 'student behaviour and classroom management', and 'teaching students with special needs', participation changes little from one age group to another, except in the case of younger teachers for whom they are higher.

Tables 3.13.a to 3.13.e in the Appendix show that variations in participation across the main five taught (school) subjects are somewhat insignificant, with roughly the same patterns apparent for teachers of any of the five (reading, writing and literature; mathematics; science; social studies; and modern foreign languages).

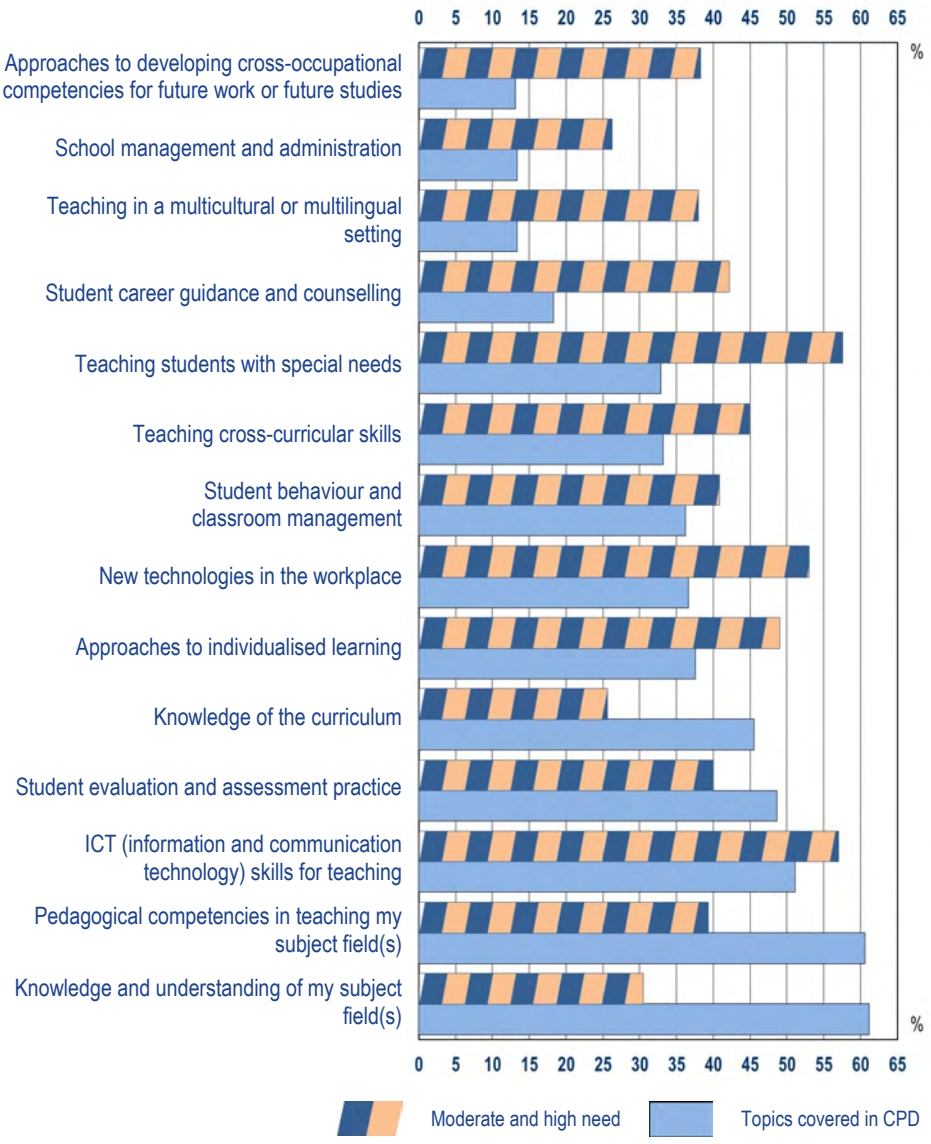
It is of interest that participation trends in the topics included in professional development activities in EU countries are broadly similar when viewed in conjunction with the expected average rates for countries and school subjects (see Table 3.14 in the Appendix). Only in the case of 'knowledge of the curriculum', 'student evaluation and assessment practices', and 'new technologies in the workplace' do real rates deviate from the expected rates by over 10 % in more than five countries.

Perhaps the foremost finding from the above data with respect to the many different topics covered in professional development activities, is the mismatch between the needs expressed by teachers and the actual content of those activities (see Figure 3.12).

While over 60 % of teachers state that their professional development activities have covered 'knowledge and understanding of my subject field(s)', around 30 % expressed a moderate or high need for activity in this particular area. Similarly, while only around 25 % of teachers expressed a moderate or high need for professional development activities on 'knowledge of the curriculum', some 45 % of them say that their activities dealt with this topic. By contrast, at the top end of the needs scale, over 57 % of teachers expressed a high or moderate need for 'teaching students with special needs', but only 33 % claimed to have addressed this topic in their professional development work. 'ICT skills for teaching' and 'student behaviour and classroom management' are the only two topics (both in the top half of the needs scale) for which needs and coverage appears to be closely matched, with differences between them of around 5 %.

The status of CPD also seems to correlate at country level with the coverage of specific topics in professional development activities. Optional CPD correlates negatively with 'ICT skills for teaching' (r=-0.44), 'teaching cross-curricular skills' (r=-0.53), and 'new technologies in the workplace' (r=-0.41). By contrast, the coexistence of CPD as a professional duty and a necessity for promotion correlates positively with the coverage of 'ICT skills for teaching' (r=0.47).

Figure 3.12: Proportion of teachers in lower secondary education (ISCED 2) declaring that their professional development activities covered specific topics in the 12 months prior to the survey, and proportion of teachers expressing moderate and high levels of need for professional development in the same topics, EU level, 2013



	Moderate and high need	Topics covered in CPD
Approaches to developing cross-occupational competencies for future work or future studies	38.3	13.1
School management and administration	26.2	13.3
Teaching in a multicultural or multilingual setting	37.9	13.3
Student career guidance and counselling	42.1	18.3
Teaching students with special needs	57.6	32.9
Teaching cross-curricular skills	44.8	33.2
Student behaviour and classroom management	40.8	36.2
New technologies in the workplace	53.0	36.6
Approaches to individualised learning	49.0	37.6
Knowledge of the curriculum	25.6	45.5
Student evaluation and assessment practice	40.0	48.7
ICT (information and communication technology) skills for teaching	57.0	51.1
Pedagogical competencies in teaching my subject field(s)	39.3	60.6
Knowledge and understanding of my subject field(s)	30.4	61.1

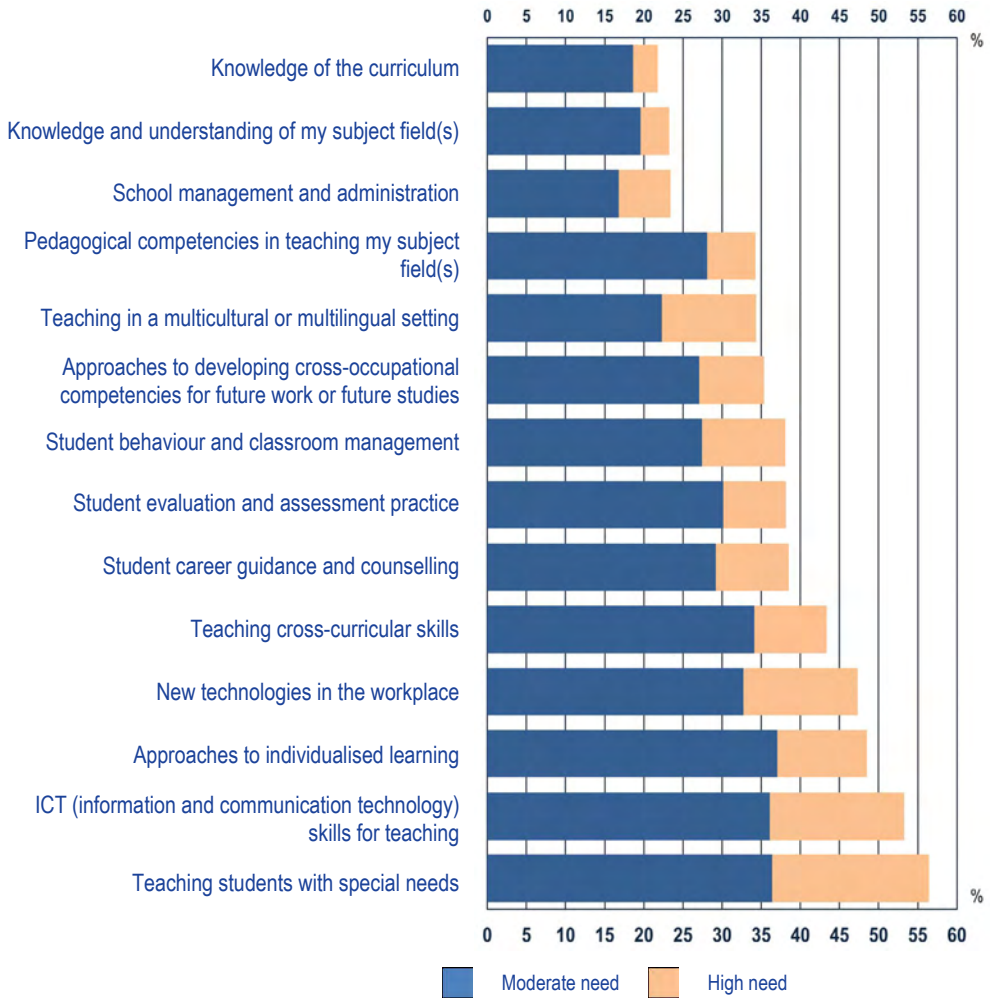
Source: Eurydice, on the basis of TALIS 2013 (see Tables 3.4 and 3.11 in the Appendix, which includes data by country).

Explanatory note

The data is shown in ascending order of topics covered in CPD.

The discrepancy between needs and topics covered in CPD can be explained in various ways, such as for example the impact of the development activity, both in terms of lowering needs or triggered higher needs. However, it could also be that what is offered to teachers or what teachers have access to in terms of topics does not always correspond to what they indicate as most important need. In this respect, special attention should perhaps be paid to topics which have not been among the CPD activities of teachers, despite the (high or moderate) need they have expressed for them (see Figure 3.13).

Figure 3.13: Proportion of teachers in lower secondary education (ISCED 2) who have not followed professional development activities in the 12 months prior to the survey in the topics for which they expressed moderate and high levels of need, EU level, 2013



	Moderate need	High need
Knowledge of the curriculum	18.6	3.2
Knowledge and understanding of my subject field(s)	19.6	3.7
School management and administration	16.8	6.6
Pedagogical competencies in teaching my subject field(s)	28.1	6.1
Teaching in a multicultural or multilingual setting	22.3	12.0
Approaches to developing cross-occupational competencies for future work or future studies	27.1	8.3
Student behaviour and classroom management	27.5	10.6
Student evaluation and assessment practice	30.1	8.0
Student career guidance and counselling	29.2	9.4
Teaching cross-curricular skills	34.1	9.3
New technologies in the workplace	32.7	14.6
Approaches to individualised learning	37.0	11.4
ICT (information and communication technology) skills for teaching	36.1	17.1
Teaching students with special needs	36.4	20.1

Source: Eurydice, on the basis of TALIS 2013 (see Table 3.15 in the Appendix, which includes data by country).

Explanatory note

The categories are ranked in ascending order of the combined percentages of teachers indicating a 'moderate level of need' and 'high level of need'.

The data suggests that there is a particularly strong case for strengthening the provision of CPD in the first five topics at the top end of the needs scale.

This argument for redirecting provision towards such topics is further supported by the correlation between lower coverage of a topic and the tendency to claim that the lack of relevant professional development available inhibits participation. As shown in Table 3.16 in the Appendix, this issue is of special concern in Bulgaria, Estonia, Italy, and Latvia.

Comparative analysis of needs and content covered in CPD can indeed help the supply chain to focus on topics in which training is felt to be most needed. Specific policies cannot be successfully implemented if teachers are not equipped with the skills and knowledge they need to carry out the work in the classroom that meets such policies. For instance, there is a positive correlation at country level (r=0.48) between the proportion of teachers expressing a moderate or high level of need for 'student career guidance and counselling' (see Table 3.4 in the Appendix) and the percentages of

early school leavers ([3]). Yet the percentages of teachers who state that their professional activities included aspects of this topic are very low (18 % in the EU – see Table 3.11 in the Appendix). In some countries, such as France and Italy, in which the topic is in high demand among teachers and in which counselling is given mostly by those with no formal training in it (European Commission/EACEA/Eurydice, 2014a, Figure 5.5, p. 96), it is vital to bring participation rates into line with demand for CPD coverage of the topic, in order to develop effective policies to reduce dropout from education and training. Teachers appear to be aware of this but are unable to rely on CPD to meet their needs.

However, the provision of appropriate training does not necessarily motivate participation in it. Several factors which seem conducive to furthering effective participation or, on the contrary, liable to weaken it are examined in the next subsection.

3.4. Enablers and barriers

Participation may be influenced positively or negatively by several factors. Certain incentives such as promotion or salary bonuses can help to stimulate participation in CPD, which may be sustained also by further supporting measures including its provision free of charge and paid study leave. By contrast, participation may be inhibited if CPD conflicts with other timetable commitments or lacks support from teachers' employers, in which case the foregoing benefits may be ineffectual.

3.4.1. Enablers

Incentives and supporting measures are often considered together, although there is a distinction between them. Whereas incentives are based on additional benefits (e.g. salary increases or promotion), support measures attempt to negate the effects of what might otherwise be barriers to participation, such as inconvenient timetabling or CPD expenditure borne by teachers. The TALIS 2013 questionnaire asked teachers to report on enablers such as salary bonuses and the payment of expenses arising from participation in professional development. According to the survey results, the most common supporting measure is scheduled time for professional development activities during regular working hours at school (see Table 3.17 in the Appendix).

The present discussion focuses, first, on four types of incentive to participation in CPD and then on several kinds of supporting measure. The former are (1) financial incentives such as salary increases and extra allowances for teachers with no change in their occupational grade or rank, (2) promotion, (3) retention of the occupational grade concerned, and (4) job mobility or transfer to another school. The supporting measures are mainly financial, and include coverage of the costs of CPD by the public authorities, support for teachers liable for such costs themselves, paid study leave for teachers engaged in longer-term CPD, and financial support for schools to cover their replacement where necessary. Incentives and supporting measures are examined separately in turn.

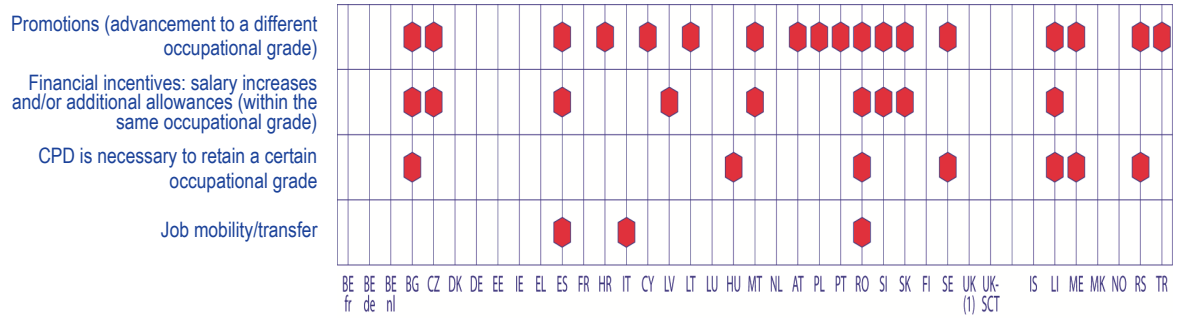
Incentives

Incentives to participate in CPD exist in almost two-thirds of the education systems surveyed (see Figure 3.14). The most common incentive is promotion. While in eight education systems teachers are normally promoted if they undertake CPD, in 10 others their participation is taken into account when evaluating them, but never the sole condition for career advancement.

([3]) Eurostat, EU-LFS [edat_lfse°_14], (data as of October 2014) http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tsdsc410&plugin=1

In the majority of countries, it is the acquisition of additional qualifications that leads to career advancement, which is sometimes associated with lengthy formal learning qualification programmes delivered by fully accredited providers. This seems to be reflected in the positive correlation between participation in 'qualification programmes' and the status of CPD as a professional duty and a necessity for promotion (r=0.45). For example, Romania, Slovenia, Slovakia, and Montenegro operate a system of points or credits obtainable through involvement in certified professional development activities provided by authorised institutions. In Portugal, teachers need to complete successfully a minimum of 25 or 50 hours (depending on their grade) of accredited in-service training sessions. However, in most countries, the additional qualification is only a *sine qua non* for the post concerned, which is then filled on the basis of a special examination or test. In Spain, teachers in secondary education may advance to the professional grade of *Catedráticos de enseñanza secundaria* (senior teachers in secondary education). Access to this category involves a competitive merit-based selection process in which participation in training and advanced courses are among the criteria taken into account.

Figure 3.14: Incentives to encourage teachers in general lower secondary education (ISCED 2) to take part in CPD, according to central regulations, 2013/14



Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

Explanatory note

Promotion means advancement to a higher professional grade. Only promotion to another teaching post is considered, so promotions to the positions of school head, teacher educator or inspector are not taken into account.
Financial incentives are defined as salary increases and/or additional allowances within the same occupational grade.

Country-specific notes

Belgium (BE fr): Primary and lower secondary teachers having completed a specific Master degree in education receive the salary level of upper secondary school teachers.
Belgium (BE de): Primary and lower secondary teachers having completed any kind of Master receive the salary level of upper secondary school teachers.
Denmark and **Netherlands**: The use of incentives is at the discretion of the schools concerned. There is no top-level authority regulation on incentives, all types of which are possible and potentially applied by schools.

Nine education systems operate financial incentives, as defined in Figure 3.14. In Bulgaria, Malta, and Slovenia, these incentives are linked to the acquisition of further formal qualifications, such as those obtained as a result of (academic) specialisation, a research-based Master's degree, or a PhD. In the Czech Republic, allowances are contingent upon teachers assuming additional responsibilities after completing certain courses. Although teachers in Liechtenstein may get small salary increases on satisfying CPD requirements, this is not automatic and they must demonstrate improved performance when evaluated. In Spain, on the other hand, additional allowances are paid every five or six years to civil servant teachers, on condition that they have taken part in a minimum total period (60-100 hours) of CPD provided by authorised centres. In this way, teachers can earn up to a maximum of five salary bonuses throughout their career. Besides extra allowances for new qualifications in Slovenia, secondary school teachers who teach three subjects after completing a supplementary study programme get a salary increase. In Slovakia, teachers obtain a salary supplement on reaching 30 credits for professional development. Credits have a validity of seven years.

Seven education systems require teachers to complete a minimum number of hours of CPD to retain their professional grade.

Teachers in **Hungary** have to attend 90 hours of CPD every seven years in order to stay in the profession.

Romania requires every teacher to accumulate at least 90 national professional credits every five years.

In **Montenegro**, teachers have to have taken part also over a five-year period in at least 24 hours of accredited professional development, comprising 16 hours on priority topics set by the Ministry of Education, and eight in other areas.

In **Serbia**, teachers need to have obtained at least 120 national CPD credits over a five-year period. At least 100 of these credits have to have been acquired through approved CPD programmes, and up to 20 through taking part in professional meetings, summer/winter schools, and professional study visits.

In Spain, Italy, and Romania, CPD is important when applying for transfers to other schools.

In **Spain**, it is an advantage when answering official 'mobility calls' (competitions for transfer) and when vacancies for 'career civil servant' teachers and technical advisors abroad are filled.

In official mobility calls involving rankings, like transfers or secondments, teachers in **Italy** are generally awarded points if they have taken part in certain types of CPD activity or acquired further qualifications. In addition, participation in CPD may be among the criteria for determining internal rankings in schools in the event of forced mobility, as for example when schools need fewer teachers because of a fall in their enrolment. In such cases, CPD may be relevant in determining which teachers retain their right to employment in the school concerned.

On occasions, certain CPD courses become necessary for some groups of teachers in the wake of fresh legislation.

Following the endorsement of new qualification requirements by the (2010) Education Act in **Sweden**, teachers who did not meet them were expected to take certain CPD courses in order to teach particular age groups or subjects.

Similarly, in **Denmark**, the 2014 reform of primary and lower secondary school education states that, by 2020, all *Folkeskole* pupils should be taught by teachers who either have teaching competence in the specific subject acquired during their initial teacher education or have similar professional competence acquired through CPD. Indeed DKK 1 billion have been allocated to strengthen the further training of teachers and social educators in the *Folkeskole* in the 2014-2020 period.

These reforms may account for the higher percentage of Swedish teachers who say they have taken part in professional development activities dealing with 'knowledge of the curriculum', and the higher percentage of Danish teachers for whom the corresponding topic is 'knowledge of my subject field(s)' (see Table 3.14 in the Appendix).

In 19 education systems – those of Belgium, Denmark, Germany, Estonia, Ireland, Greece, France, Luxembourg, the Netherlands, Finland, the United Kingdom, Iceland, the former Yugoslav Republic of Macedonia, and Norway – the participation of teachers in CPD is not encouraged specifically through incentives regulated by the top level of authority. In some of these countries, CPD is sustained instead either by means of supporting measures or by incentives introduced solely at the discretion of individual schools (as in Denmark and the Netherlands).

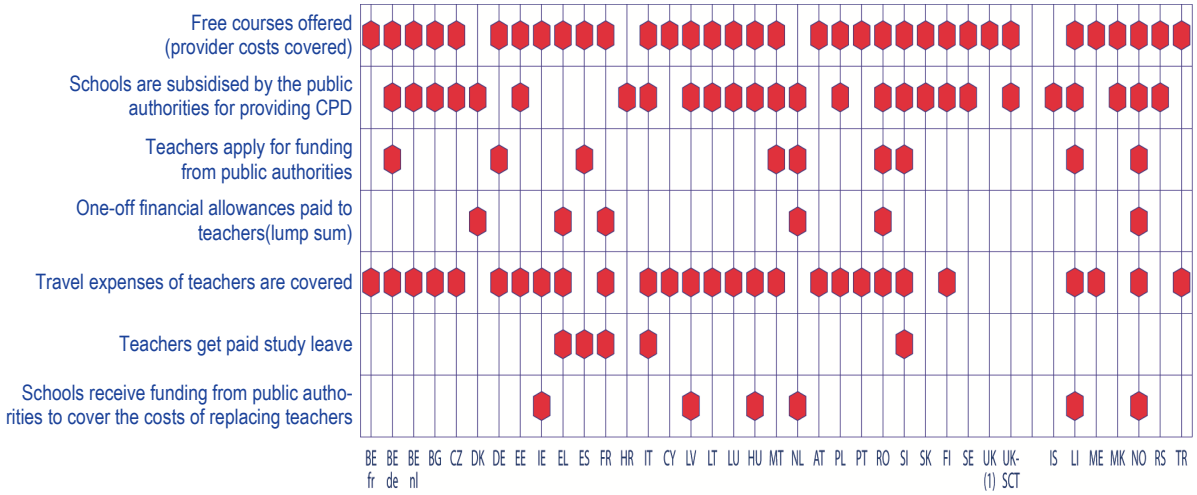
Supporting measures

In most countries, teacher participation in professional development activities is sustained by measures aiming to eliminate disincentives to it – most notably the possibility that teachers might have to pay for CPD themselves. Besides measures to ensure that its costs are met by other means, teachers may also be granted paid study leave, while schools may receive support for the temporary replacement of those engaged in CPD.

All education systems provide some kind of support to cover expenditure on CPD that might otherwise be incurred by teachers (see Figure 3.15), although the administrative mechanisms for doing so vary. Most countries adopt at least two of the following procedures: the public authorities offer free courses,

whether run centrally or by accredited providers; schools are subsidised by the authorities for organising CPD, either directly or after submitting individual applications; teachers apply for funding to cover or reclaim the costs of CPD to themselves. Where subsidies are available, schools normally manage this budget in full autonomy, sometimes taking into due considerations nation-wide recommendations or frameworks.

Figure 3.15: Supporting measures to help teachers meet the costs of CPD in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

Country-specific note

Spain: Most Autonomous Communities only cover travel expenses in exceptional circumstances.

Among the three methods, the most common is offering courses or arranging for their provision free of charge. This is the only method adopted in Belgium (French Community), Cyprus, Austria, Portugal, the United Kingdom (England, Wales, and Northern Ireland), Montenegro, and Turkey. In these countries, the courses are offered by centrally established or accredited institutions. The combination of free courses as a sole measure for CPD, together with the limitation of provision to a central institution, points in the direction of the State as main responsible for teachers' professional development, at least in those areas that are considered crucial to the quality of the education system. Interestingly, in fact, in countries where this is not the only path for accessing CPD, free courses are limited to topics that are considered mandatory for teachers, or that fall into priority areas determined by top-level authorities.

The publicly subsidised provision of CPD by schools themselves is the second most common method of shifting its costs away from teachers. While it is the only such method adopted in Croatia and Iceland, it is implemented alongside other methods in 26 European education systems. In most of them, it is combined with the availability of free courses, and targets more grass roots school-based needs. As a rule, publicly subsidised CPD is included in the school budget. In Italy, however, subsidies are earmarked for professional development projects submitted by schools in reply to a call for proposals on priority topics. In Lithuania, both school budget and project-based subsidies are possible. In countries in which CPD subsidies are part of the school budget, they may either be ring-fenced (i.e. correspond to a predetermined specific sum), or correspond to a sum that schools can decide for themselves in line with their own requirements. For example, in the Czech Republic, the budget for CPD is part of the overall funding provided to schools. Similarly, in the Netherlands and the United Kingdom (England, Wales, and Northern Ireland), funding for CPD is part of the school budget and not ring-fenced.

The approach where teacher CPD is essentially the preserve of schools and their administrative bodies may be more responsive to individual school requirements. However, it may cater less effectively for more broadly perceived needs, and also weaken the position of teachers in the negotiation process on school priorities if other forms of funding (e.g. teacher direct funding) are not available.

In **Estonia**, the 2000-2012 period witnessed a free-market approach to CPD. Funds were awarded to schools which could arrange for any CPD activities they regarded as appropriate. Since 2013, however, several such activities have been centrally managed on the assumption that universities take account of national education priorities. Nevertheless, 1 % of the annual salary fund for teachers is still transferred directly to schools from the state budget and earmarked for CPD, and in this case schools make their in-service training decisions on the basis of their own needs and development plans.

In nine education systems, teachers can apply individually for public funding to cover the costs of CPD not offered by schools, the education authorities or other public institutions. In all cases, the possibility of doing so coexists with measures for freely provided or subsidised CPD. In Belgium (German-speaking Community), they may only do so if their CPD activity lasts at least 10 hours. In some countries, applications may be possible for a range of activities including courses, seminars, conferences, working groups, and school-based training projects. In others, they may extend to full degree programmes. For example, the Netherlands has a 'teacher development grant' to support those working towards an additional Bachelor's or Master's degree, and a 'PhD grant' for university doctoral research for two days a week over a four-year period with full salary entitlement. Scholarships for Master's degrees and general postgraduate studies are also available in Malta, subject to a selection process. In Slovenia, Liechtenstein, and Norway, grants for teachers – though not specifically meant to cover postgraduate expenditure – are intended for those seeking to qualify for teaching at a higher level (Slovenia), or improve the quality of their teaching (Liechtenstein). Whatever its nature, financial support directly available to teachers correlates positively (r=0.56) with 'qualification programmes' (see Figure 3.8), indicating that direct teacher funding may be a very suitable supporting measure for this type of professional development activity.

Some countries pay teachers lump-sum allowances. Greece, for example, pays a one-off allowance to teachers who attend certain CPD activities. In the Netherlands, teachers in secondary schools are entitled to a training allowance of at least EUR 500 a year (school year 2013/14). In France, the lump sum is paid only when training occurs during school holidays and corresponds to half the hourly pay of the teachers concerned.

Three further supporting measures are available in some education systems, namely the reimbursement of travel expenses, paid study leave, and support to cover school staff replacement costs.

As far as travel expenses are concerned, 27 education systems reimburse the costs of travel for certain types of CPD activity, especially where it is compulsory or involves courses offered by the top-level education authorities. In such cases, the costs are reimbursed directly by those authorities or by the school concerned. For example, in Belgium (Flemish Community), the majority of schools cover the costs of travel and CPD learning materials from their school budget. In Italy, travel costs are reimbursed for courses organised by the Ministry of Education. In Cyprus, this applies to courses provided by the Cyprus Pedagogical Institute. Poland wholly or partially covers expenditure on travel and subsistence when teachers have been told by their school to attend CPD activities. In Romania, travel costs for activities undertaken with the agreement of the education authorities are reimbursed. Geographical restrictions are often applied to reimbursement so that, in Portugal for example, travel expenses are only refunded where the distance between a teacher's home and place of training is greater than a fixed minimum.

In a few education systems, teachers are granted paid study leave for medium- or long-term absence from work in order to attend courses leading to a formally recognised qualification.

In **Greece**, they may apply for up to four years of paid leave to complete a postgraduate degree.

In the case of CPD related to educational innovation and research activity in **Spain**, teachers may take paid study leave of up to one year.

In **France**, teachers may be awarded paid leave of up to three years at 85 % of their salary, plus a further subsistence allowance for up to one year, if they take part in longer-term CPD activities.

Italy allows teachers to take 150 hours of paid leave to study for a further degree or other academic qualifications.

In **Slovenia** teachers who study to acquire additional qualifications are granted five days to pass an exam, 15 days to prepare a thesis paper, and 35 days to prepare a doctoral dissertation.

There is a positive correlation (r=0.60) between this measure and 'individual or collaborative research on a topic of interest to you professionally' (see Figure 3.8). Like financial support directly available to teachers, paid study leave seems to serve its purpose well.

Replacement costs are those borne by schools to maintain their activity satisfactorily when teachers are unavailable because of their involvement in CPD. Only in six countries, namely Ireland, Latvia, Hungary, the Netherlands, Liechtenstein, and Norway, do schools receive public funding specifically to cover such costs under certain circumstances. In Ireland, it is provided in the case of teachers replaced for one or two days during their participation in nationally funded CPD programmes. In Hungary, it is calculated as part of the overall school funding. In the Netherlands, such support is only available for the replacement of teachers in receipt of a CPD grant or PhD grant.

The role played by incentives and supporting measures

From a quick glance at Figures 3.14 and 3.15, it appears that supporting measures are commoner and more varied than incentives. Both incentives and supporting measures may have a positive impact on participation in CPD. The correlations between, on the one hand, participation in research and paid study leave or, on the other, the existence of direct funding opportunities for teachers with qualification programmes or the role of promotion in increasing the time devoted to CPD and the diversity of topics, suggest that indeed some measures can play a role.

However, the impact might not always be as expected. For example, CPD provided free of charge is a widely used supporting measure (see Figure 3.15) which, at first sight, should encourage participation in it. However, there is no positive correlation at country level between this measure and increased participation. On the contrary, it correlates negatively (r=-0.45) with 'participation in a network of teachers formed specifically for the professional development of teachers', possibly indicating that the availability of free courses inhibits the development of such networks. Furthermore, the mean participation (calculated in terms of the number of topics) of those who have to pay for part of their CPD is higher than that of teachers who have to pay for all or none of it (see Table 3.18 in the Appendix). This might mean that teachers enrol in professional development activities for which they have (partially) to pay, in addition to those that are offered free of charge. From one angle, their enrolment might be regarded as a means of further diversifying the topics in their CPD by taking part in activities that are not provided free. But it might also indicate that teachers need to enrol in activities which address their most relevant needs as these are not offered free. So while free courses are a supporting measure without which participation in CPD is likely to fall, they may also have to be made more relevant by taking account of how teachers themselves perceive their needs.

Other less tangible factors may also have a positive impact on the motivation that impels teachers to develop further their ability and skills. Three such factors in particular appear to increase their

participation, in terms of the number of different topics covered in their CPD activities. They are, first, specific aspects of how these activities are organised or delivered; secondly, the feedback received by teachers; and, thirdly, their own teaching style. The regression analysis (see Table 3.19 in the Appendix) shows that teachers who tend more to collaborate with other teachers, and who have sensed a stronger feedback when evaluated, and taken part in CPD activities incorporating opportunities for active learning, have also reported a wider variety of topics in their professional development activities.

3.4.2. Barriers

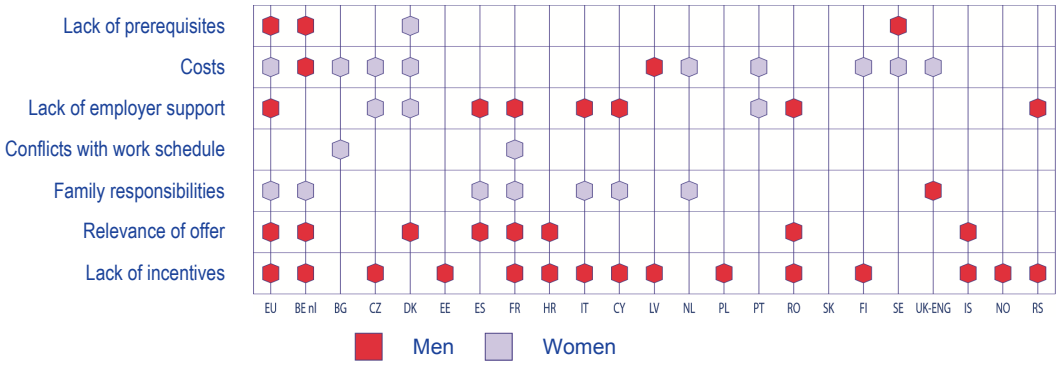
TALIS (OECD, 2014) reports that the most common barrier to participation is 'conflicts with the work schedule', although time set aside for CPD during regular working hours does not appear to have a positive impact on this perception.

But which teachers perceive that the effect of a particular kind of barrier to their participation in CPD is stronger than that of others? The following brief account describes the likelihood of indicating one or the other specific barrier, among the 7 listed in the TALIS 2013 survey ([4]) according to the gender, experience, or employment status of teachers ([5]).

Gender

In the EU as a whole, all barriers to CPD except one affect women and men teachers in different ways (see Figure 3.16). For example, men are more likely than women to agree or strongly agree that the lack of prerequisites, the lack of employer support, the lack of relevant professional development on offer, and the lack of incentives are barriers. In some countries, however, the opposite trend is apparent. Women teachers in the Czech Republic, Denmark, and Portugal are more likely to agree or strongly agree that the lack of employer support is a barrier to CPD, and in Denmark they also identify the lack of prerequisites as a barrier.

Figure 3.16: The predictive value of gender in determining the impact of barriers to participation in professional development activities by teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.20 in the Appendix, which includes off-ratios by country).

Explanatory note

For further explanation of multiple logistic regressions, see the Statistical Note.

([4]) These are: Lack of prerequisites; Costs; Lack of employer support; Conflicts with the work schedule; Family responsibilities; Relevance of CPD offered; Lack of incentives.

([5]) The odd ratios are calculated using a logistic regression model with the three independent variables of gender, age, and employment status performed separately on each of the seven dependent variables divided into opposite groups of 'disagreeing and strongly disagreeing' and 'agreeing and strongly agreeing' respectively. The odds ratios therefore should be regarded as the increased likelihood of one variable under the control of the other two independent variables.

Women teachers in the EU consider that the costs of CPD and family responsibilities are barriers to CPD more often than men teachers. In some countries, these issues are felt more keenly by women than in others, as in the case of family responsibilities in France, Italy, and the Netherlands, and the costs of CPD in Bulgaria, Denmark, and Portugal. In the United Kingdom (England), men teachers report family responsibilities as a barrier to CPD more often than women. Similarly, in Belgium (Flemish Community) and Latvia, men teachers also feel that the costs of CPD are a barrier more often than their female counterparts.

Finally, the most commonly cited barrier (i.e. 'professional development conflicts with my work schedule') appears not to be gender-related, as it affects both men and women teachers to virtually the same extent.

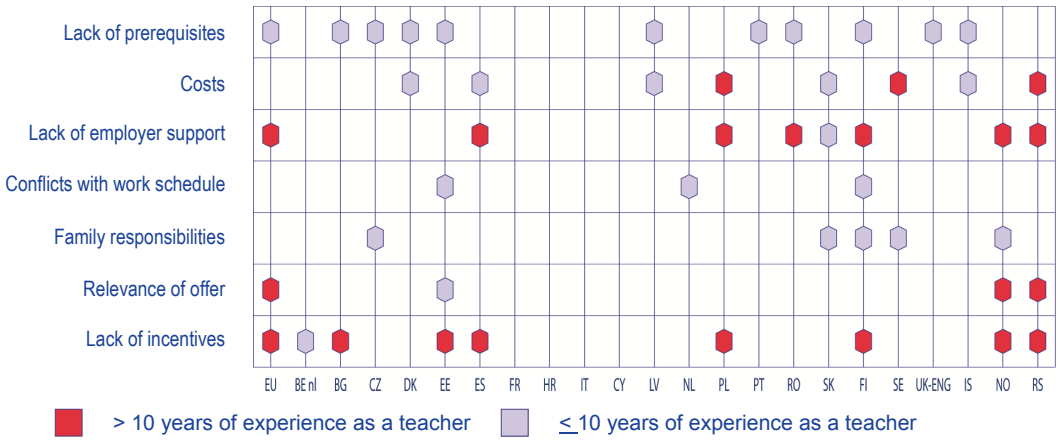
Experience

The independent variable of experience has been divided into opposite groups of teachers with 10 years of experience or less, and those with more than 10 years of experience respectively.

In the EU as a whole, teachers with over 10 years of experience are more likely to report that lack of employer support, the relevance of the professional development offered, and the lack of incentives are barriers to CPD than those with 10 years of experience or less (see Figure 3.17). The latter group are more likely to report that the 'lack of prerequisites' is a barrier. This impediment to CPD seems to be felt consistently by the less experienced group in 10 out of the 22 countries surveyed. Their reaction seems particularly marked in the Czech Republic, Estonia, Latvia, Finland, and Iceland, and far from negligible in the other countries (see Table 3.20 in the Appendix).

The costs of CPD and conflicts with the work schedule seem to affect teachers in the EU similarly, irrespective of the length of their experience although, as shown in Table 3.20 in the Appendix, differences exist between individual countries.

Figure 3.17: The predictive value of experience in determining the impact of barriers to participation in professional development activities by teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.20 in the Appendix, which includes odd-ratios by country).

Explanatory note

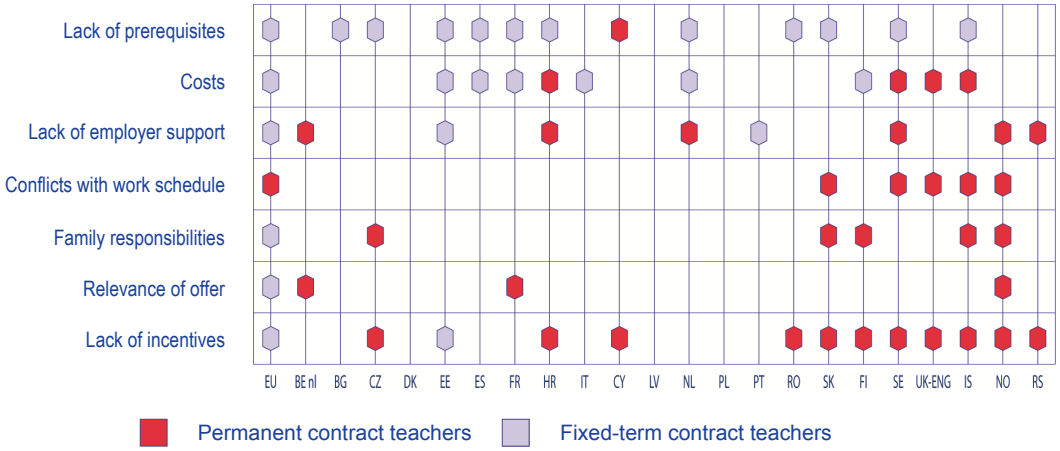
For further explanation of multiple logistic regressions, see the Statistical Note.

Employment status

As in the case of experience, employment status has been divided into opposite groups of permanent and fixed-term contract teaching staff, on the basis of the replies by teachers to the initial part of the TALIS 2013 questionnaire.

Figure 3.18 shows that, in the EU as a whole, fixed-term contract teachers are more likely than permanent staff to consider that six of the seven dependent variables listed are barriers to participation in CPD (the exception is the 'conflicts with work schedule' variable). Thus the fixed-term contract group are more likely than permanent teachers to agree or strongly agree that the lack of prerequisites are a barrier; they are more likely to do so in the case of costs, where lack of employer support is concerned, in the case of family responsibilities, in response to relevance of the offer, and as regards lack of incentives.

Figure 3.18: The predictive value of employment status in determining the impact of barriers to participation in professional development activities by teachers in lower secondary education (ISCED 2), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 3.20 in the Appendix, which includes odd-ratios by country).

Explanatory note

For explanation of multiple logistic regressions, see the Statistical Note.

By contrast, permanent teachers in the EU are more likely to indicate that conflicts with the work schedule are a barrier to their participation in CPD. In the United Kingdom (England) and Norway, this issue seems to be a particularly acute one for permanent teachers.

Although fixed-term contract teachers in the EU are more likely to view family responsibilities, lack of relevance of the offer, and lack of incentives as barriers to participation in CPD, there are many countries exhibiting contrary trends. Permanent teachers, for example, are more likely to indicate that the lack of incentives is a strong or very strong barrier to participation in the Czech Republic, Croatia, Cyprus, Romania, Slovakia, Finland, Sweden, the United Kingdom (England), Iceland, Norway, and Serbia.

CHAPTER 4: TRANSNATIONAL MOBILITY

In its Conclusions of 12 May 2009, the Council of the European Union highlighted the need to gradually expand transnational mobility, notably for teachers, with a 'view to making periods of learning abroad – both within Europe and the wider world – the rule rather than the exception' ([1]). In its Conclusions of 28-29 November 2011, the EU Council invited the European Commission to develop indicators on teacher mobility in order to follow up progress in this field ([2]). Strengthening the intensity and scale of the mobility of school staff is necessary to improve the quality of school education in the Union, as stated in the new Erasmus+ Programme, the EU programme for education, training, youth and sport (2014-2020) ([3]).

The transnational mobility of teachers is important for several reasons. For those involved in it, the experience represents first-hand contact with a different education system in which approaches to teaching, as well as its methodologies and organisation, may differ. It is a unique opportunity for teachers to reflect on their own ways of teaching and exchange views about their experience with colleagues abroad. Transnational mobility may also help them overcome scepticism regarding other teaching methods, by providing them with an opportunity to observe their use directly and their impact on students. This experience may in turn motivate them to gain fresh skills for more innovative approaches of their own. Conversely it may be an opportunity too, for them to discuss their own approaches with teachers at their host institution, thereby developing a greater sense of empowerment and professional recognition. Finally, working visits by teachers to a country whose main language is not their mother tongue is likely to help them develop their language skills, an asset of special importance to those whose subject is modern foreign languages.

Students may also benefit from transnational teacher mobility, whether directly – where they are involved in cooperation projects using innovative ICT-based technologies or in foreign school exchanges initiated by their teachers – or indirectly, as when the latter are motivated to develop their teaching skills and impart a more European or international dimension to learning at school. This can be of particular importance to students unable to travel abroad on their own.

Schools too may gain from the transnational professional mobility of their teachers. These staff may help to spread good practice, challenging their colleagues by exchanging information, ideas and experience. They may also support the commitment of the whole school community to virtual or physical mobility (for example via European cooperation projects). Hosting teachers from another country is also a way of enriching the experience of the school community.

This chapter provides a picture of the transnational mobility for professional purposes of teachers in lower secondary education (ISCED 2). Such mobility is defined here as physical mobility for professional purposes to a country other than the country of residence, either during initial teacher education (ITE) or as a practising teacher. Private mobility – such as holiday travel abroad for non-professional purposes – is not taken into account here. Furthermore, the TALIS 2013 survey restricts this definition to periods of a week or more spent at a foreign educational institution or school, and does not take into consideration travel abroad to attend conferences or workshops.

([1]) Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), OJ C 119, 28.05.2009, p. 3.

([2]) Council conclusions on a benchmark for learning mobility, OJ C 372, 20.12.2011, p. 33.

([3]) Regulation (EU) No 1288/2013 of the European Parliament and of the Council of 11 December 2013 establishing 'Erasmus+': the Union programme for education, training, youth and sport and repealing Decisions No 1719/2006/EC, No 1720/2006/EC and No 1298/2008/EC, OJ L 347, 20.12.2013, p. 52.

The chapter also contains information on overall participation and considers the timing of transnational mobility in the career of teachers. It examines the main reasons why they go abroad for professional purposes, as well as the influence of certain factors on their transnational mobility, among them their age, the number of years spent in service, gender, the subject(s) taught, and existing mobility schemes at EU level or organised by national or regional authorities. Finally, an examination of various factors combined is undertaken in order to gauge the predictive value of several of them in determining the likelihood for teachers to be transnationally mobile.

The TALIS 2013 survey covers 22 European countries, including 19 EU Member States. However, two EU Member States – Bulgaria, and the United Kingdom (England) – and a non-EU country – Serbia – did not contribute specifically to the questions on transnational mobility. As a result, all EU averages for figures from TALIS 2013 are calculated with reference to 17 EU Member States, instead of 19 in this chapter.

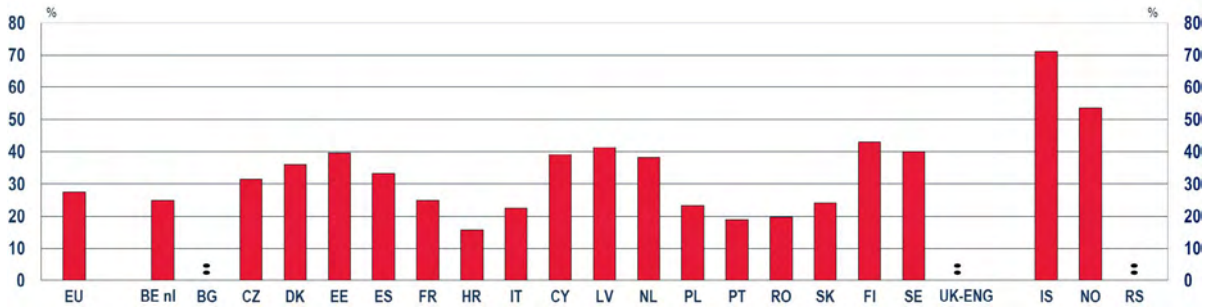
4.1. Participation and age

The TALIS 2013 questionnaire introduced the question on teacher mobility abroad for professional purposes with the following wording: 'Have you ever been abroad for professional purposes in your career as a teacher or during your teacher education/training?' No conclusion, therefore, can be drawn from the TALIS survey on the frequency of travel abroad by teachers for professional purposes, or how recently it may have occurred.

As shown in Figure 4.1, 27.4 % of teachers within the EU have been abroad at least once for professional purposes. In almost half of the European education systems surveyed, the proportion of the mobile teacher population – in this sense – is even lower. This applies to Belgium (Flemish Community), France, Croatia, Italy, Poland, Portugal, Romania, and Slovakia.

The proportion of mobile teachers is highest in the Nordic and Baltic countries. In the case of the former it is exceptionally high in Iceland, in which over two-thirds of teachers have gone abroad for professional purposes, and Norway in which over half of them have done so.

Figure 4.1: Proportion of teachers in lower secondary education (ISCED 2) who have been abroad for professional purposes, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 4.1 in the Appendix).

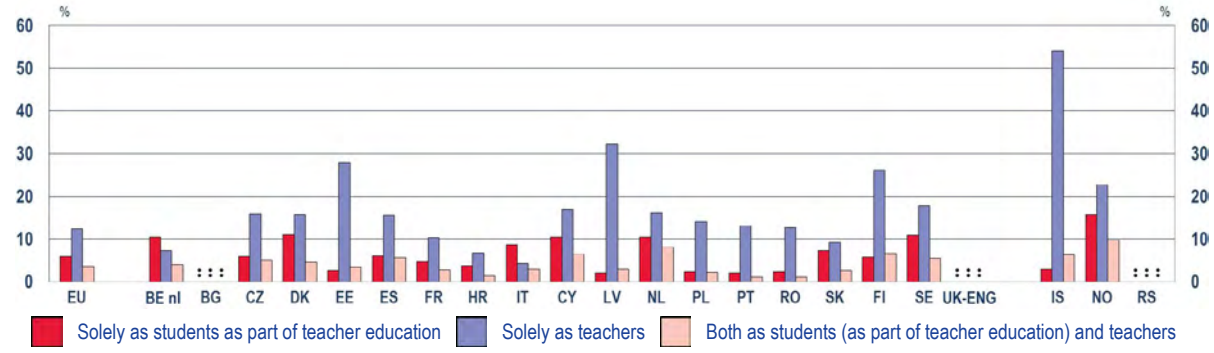
In most countries, the mean age of (transnationally) mobile and non-mobile teachers is roughly the same (see Table 4.2 in the Appendix). This means that their age is not generally a factor with much bearing on their travel abroad for professional purposes. However, in a few countries, the difference between the mean ages of mobile and non-mobile teachers is over three years. In Belgium (Flemish Community), the mean age of mobile teachers (36.6 years) is much lower than that of non-mobile teachers (40.0 years) indicating that the former tend to be younger, whereas the opposite trend is

apparent in Estonia, Finland, and Iceland (with mean ages for mobile teachers of 49.9, 46.3 and 46.5 years respectively, and 46.6, 42.3 and 41.3 years in the case of those who are not mobile).

4.2. Timing of transnational mobility in the career of teachers

Teachers may be mobile for professional reasons either during ITE, or as practising teachers. The TALIS 2013 database provides useful information on the proportion of teachers who have been abroad at one or both of these stages.

Figure 4.2: Distribution of teachers in lower secondary education (ISCED 2) who have been abroad for professional purposes, during ITE or as practising teachers (or both), 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 4.3 in the Appendix).

From Figure 4.2 it is clear that, in almost all European countries surveyed in TALIS 2013, the proportions of those who have gone abroad only as a teacher are far greater than in the case of the other two categories shown. In the EU as a whole, 12.4 % of teachers say they have been abroad only as teachers, 5.9 % solely during ITE, and 3.6 % as both teachers and students. In Estonia, Latvia, Finland, and Iceland, which have higher teacher mobility rates (see Figure 4.1), the proportion of those who say that they have been abroad for professional purposes only as teachers is particularly high, ranging from 26.2 % (in Finland) to 54.1 % (Iceland).

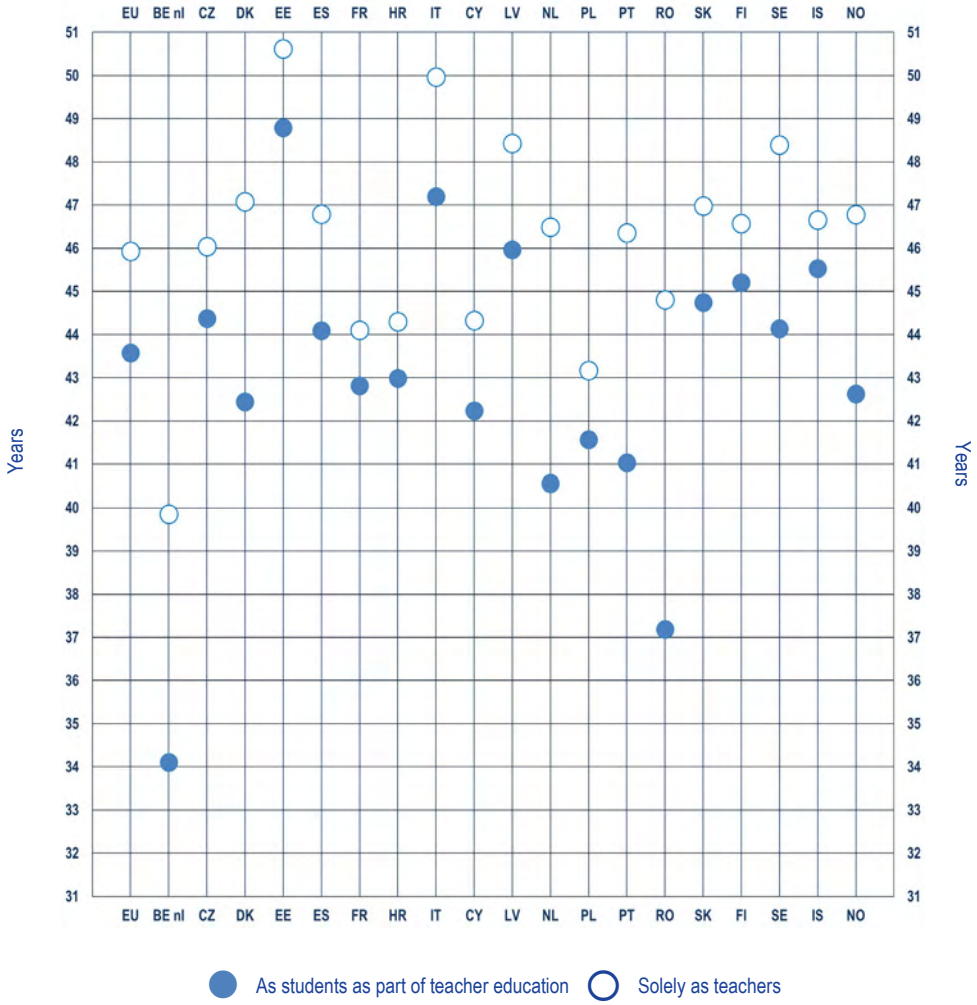
By contrast, in Belgium (Flemish Community) and Italy, a higher proportion of transnationally mobile teachers went abroad for professional reasons only as a student.

An unusual pattern is apparent in Norway, one of the countries with a high teacher mobility rate (see Figure 4.1). While mobility only as a teacher comes first in Norway (22.8 %), the other two categories are nevertheless well represented and indeed the highest among the countries surveyed (with proportions of 15.7 % in the case of 'solely as students as part of teacher education', and 9.8 % in the 'both as a student and as a practising teacher' category).

ITE is usually undertaken when prospective teachers are young. An indirect way, therefore, of determining whether there has been a recent tendency for them to go abroad as part of their ITE is to compare the mean age of teachers who have done so at this stage, with the mean age of those who have done so solely as a practising teacher.

As shown in Figure 4.3, there is almost no difference in the EU between the mean age of teachers who report that they have gone abroad as part of their ITE and the mean age of those who say they only did so as a practising teacher. However, the mean age of those who went abroad as students is over five years lower than that of their colleagues who went abroad solely as teachers in Belgium (5.8 years in the Flemish Community), the Netherlands (5.9 years), Portugal (5.4 years), and Romania (7.6 years). This indicates that mobility during ITE is a more recent trend in these education systems.

Figure 4.3: Mean ages of teachers in lower secondary education (ISCED 2) who have been abroad for professional purposes during ITE or as practising teachers, 2013



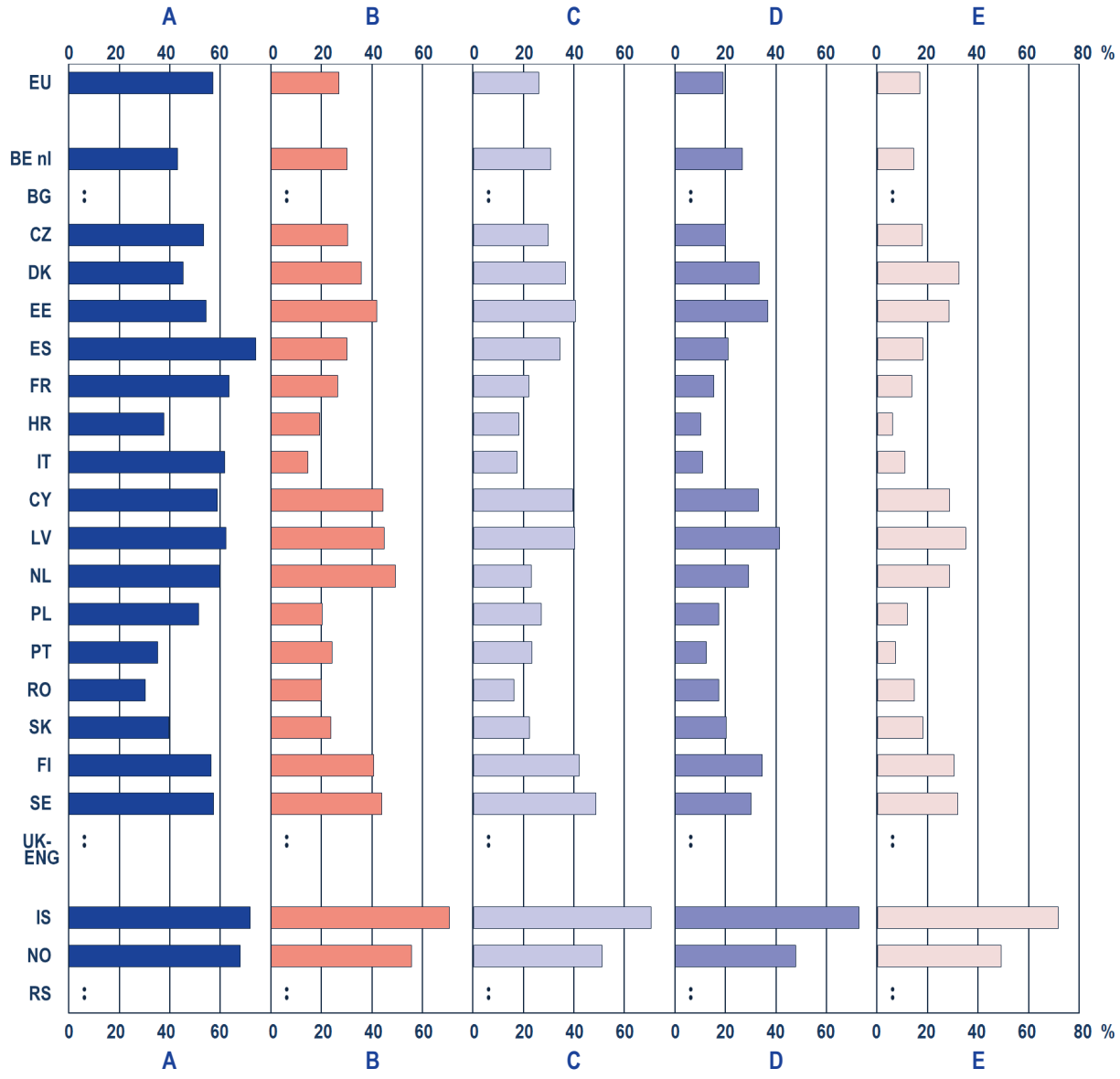
Source: Eurydice, on the basis of TALIS 2013 (see Table 4.4 in the Appendix).

4.3. Influence of the subject taught

The transnational mobility of teachers may also depend on the nature of the subject(s) taught, as shown in Figure 4.4.

In all countries surveyed except Iceland, **modern foreign language teachers** are the most mobile compared to teachers of the other four main subjects represented in Figure 4.4. In the EU, over half of them have been abroad. Modern foreign language teachers obviously need to train and practice the language they teach. They also need to experience close contact with one of the countries which national language corresponds to the language they teach, in order to gain a deeper cultural insight to transmit to their students. For these teachers more than those of other subjects, transnational mobility seems to be a professional need.

Figure 4.4: Proportion of teachers in lower secondary education (ISCED 2) who have been abroad for professional purposes, by subject taught, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 4.5 in the Appendix).

However, the other side of the coin is that over 40 % of modern foreign language teachers surveyed in the EU have never been abroad for professional purposes, a finding possibly relevant to the quality teaching of foreign languages. In a few countries, this situation may be partly attributable to the position of the foreign language concerned. For example in the Flemish Community of Belgium, French is regarded as a modern foreign language in that it is not the language of instruction, although it is also a national language in Belgium (see EACEA/Eurydice/Eurostat, 2012, p. 18 and p. 47). This means that Belgian teachers of French in the Flemish Community may exercise their language skills within their own country.

Spain, which comes 10th in the comparative ranking of countries by proportion of all teachers surveyed who have gone abroad for professional reasons (see Figure 4.1), has the highest proportion of modern foreign language teachers who have done so. This country exceeds the EU average by

around 10 percentage points as regards the professional mobility of modern foreign language teachers.

The most mobile groups by subject, after those who teach modern foreign languages, are teachers of **social studies** and of **reading, writing and literature**. Around a quarter of these two groups went abroad for professional purposes, although this is only half as much as the proportion of modern foreign language teachers.

Teachers of **science** and of **mathematics** are the least transnationally mobile groups in the EU, under 20 % of whom reported that they had been abroad for professional purposes.

The countries with the seven highest proportions of teachers who have been abroad for professional reasons, namely Estonia, Cyprus, Latvia, Finland, Sweden, Iceland, and Norway (see Figure 4.1), also have high proportions of mobile teachers that exceed the EU average by 10 percentage points or over, in at least three of the five main subjects.

Iceland constitutes a marked exception to these trends as it has the greatest proportion of internationally mobile teachers, whose involvement in professional activity abroad is consistently high irrespective of their school subject, as shown in Figure 4.4.

4.4. Purposes of transnational teacher mobility

Figure 4.5 indicates proportions of transnationally mobile teachers, by type of professional reason for which they have gone abroad. In the TALIS 2013 questionnaire, mobile teachers were asked to provide as many answers as seemed necessary. For this reason, the percentages in Figure 4.5 cannot be meaningfully compared with the proportions shown in others.

Accompanying visiting students is the most common reason for the professional mobility of teachers, 44.2 % of whom cited it in the EU. Over half of the teachers in the Czech Republic, France, Cyprus, and Portugal said that they went abroad for this purpose.

Learning languages is also a very common motive with 39.6 % of mobile teachers in the EU stating that this was why they went abroad; the same was also reportedly the case for over half of the mobile teachers in Spain and Italy.

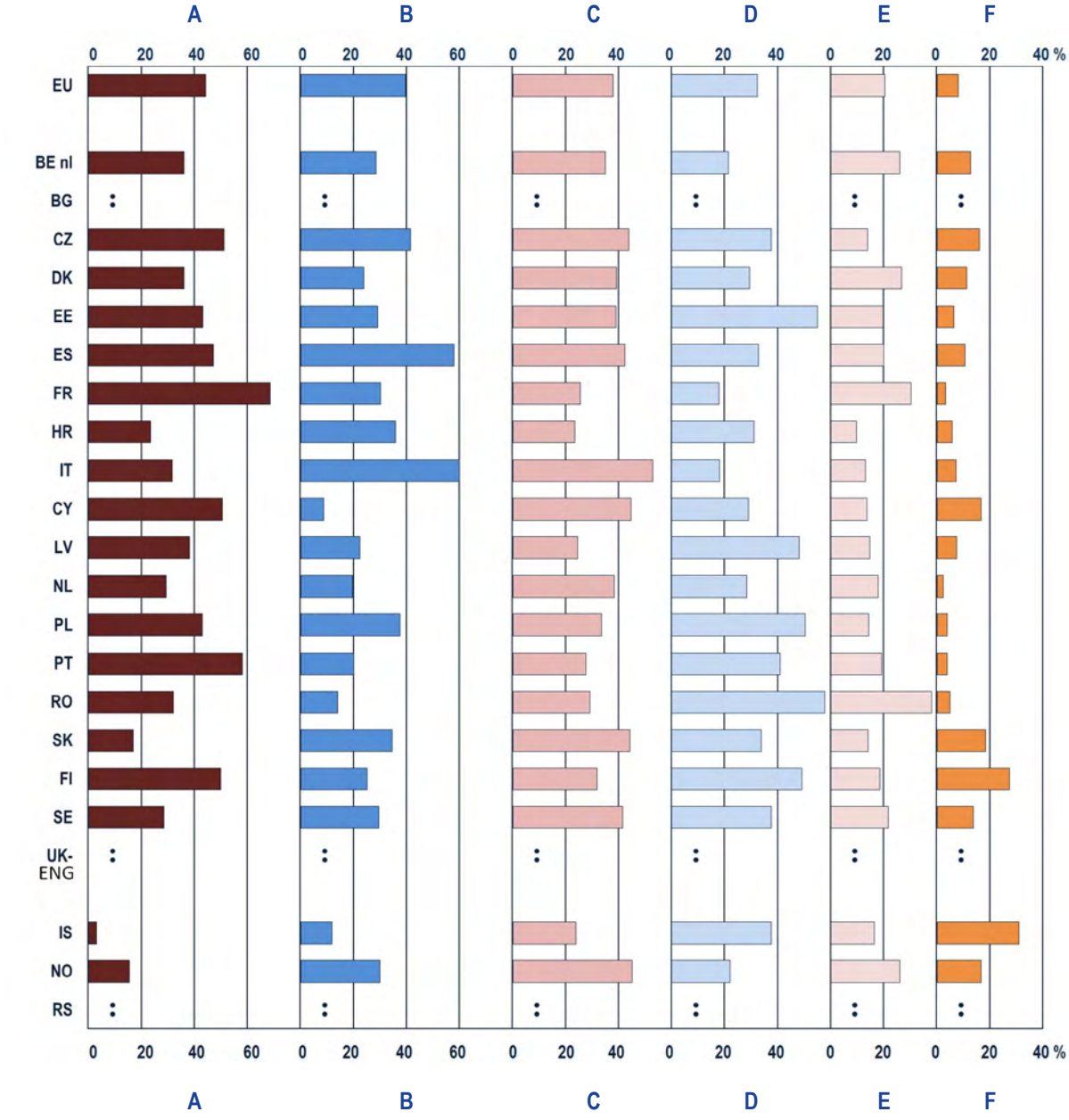
Study abroad as part of teacher education is almost as common a reason given, cited by 37.8 % of mobile teachers in the EU and almost one out of two in Italy.

Establishing contacts with schools abroad is a preparatory phase in organising cooperation between schools or visits by students to a school abroad. This type of mobility generally involves teachers and students in a medium-term project, in which the visit is a small part of a longer period of physical or virtual student mobility, often using ICT. In the EU, 32.2 % of mobile teachers said they went abroad to establish contacts, while over half of the mobile teachers in Estonia, Poland, and Romania cited this activity as a reason for doing so.

Teaching abroad is only given by 20.4 % of mobile teachers in the EU as a reason for mobility. Romania is the country in which it was most often cited (by 37.9 % of the teachers concerned) and in which mobility for this purpose came second behind ‘establishing contact with schools abroad’ (57.6 % of teachers). Romania is also one of three countries in which transnational teacher mobility rates barely reach 20 % (see Figure 4.1).

Finally, travel abroad to **learn other subjects** is far less common than other reasons for mobility with only 8.1 % of mobile teachers in the EU reporting that they went abroad for this purpose.

Figure 4.5: Proportion of mobile teachers in lower secondary education (ISCED 2), with respect to their professional reasons for going abroad, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 4.6 in the Appendix).

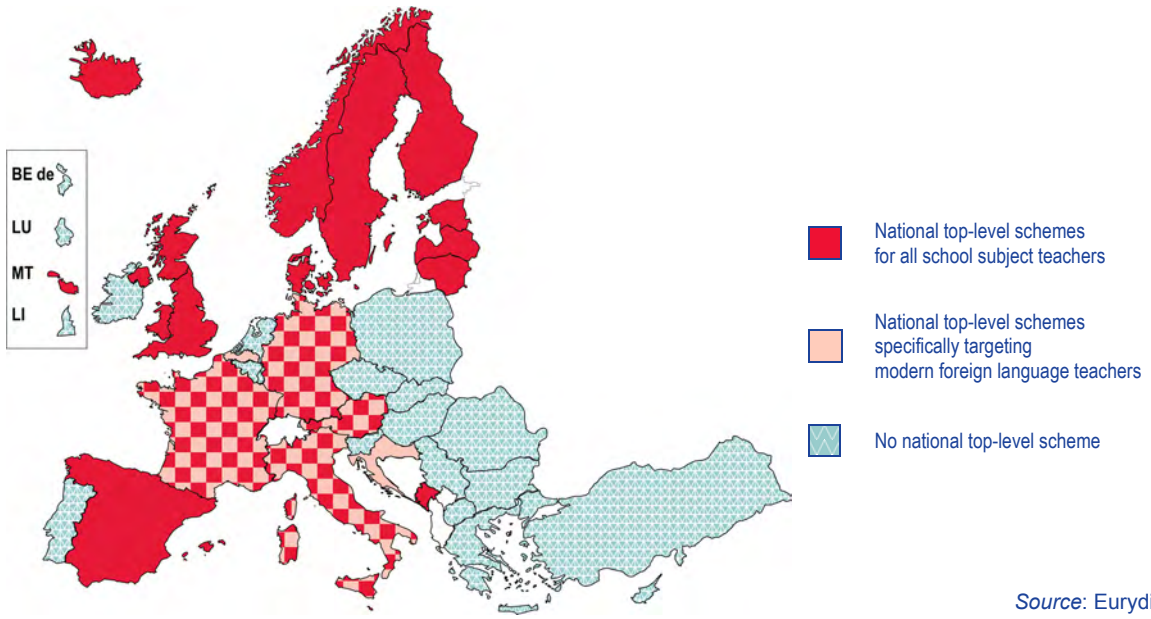
4.5. Funding schemes

Organisation

In the EU, the main means of funding teacher mobility both during ITE and in-service is Erasmus+ (2014-2020), the EU Programme for Education, Training, Youth and Sport ([4]).Through this programme, both graduating and practising teachers may get mobility grants to engage in studies or professional development abroad, and may also be involved in transnational projects entailing their mobility.

Figure 4.6 shows countries with national top-level schemes for transnational teacher mobility. Such schemes exist in over half of all European countries, mainly in western and northern Europe. In Spain, some teacher mobility schemes are organised nationally, and others by the Autonomous Communities. Some countries without a central scheme nevertheless have regional mobility schemes, as in the case of the Czech Republic, Poland, and Romania.

Figure 4.6: National top-level schemes for the transnational mobility of teachers in lower secondary education (ISCED 2), 2013/14



Source: Eurydice.

Country-specific note

Italy: The scheme targeting modern foreign language teachers also includes teachers for Content and Language Integrated Learning (CLIL).

In Germany, France, Italy, and Austria, some existing national top-level schemes specifically target modern foreign language teachers. In Belgium (Flemish Community), and Croatia, this is currently the only type of scheme that exists.

([4]) This programme follows similar preceding programmes supporting staff mobility, including the Lifelong Learning Programme (LLP, 2007-2013), and in particular its Comenius sub-programme for the school sector.

In order to promote the teaching of their language abroad, some countries have introduced transnational mobility schemes for modern foreign language teachers elsewhere who teach their language, or mobility schemes for their own nationals within bilingual education projects.

In **Germany**, the 'Schools: Partners for the Future' initiative (*Schulen: Partner der Zukunft* – PASCH) supports training and work shadowing programmes in Germany for teachers of German. The *Goethe Institut* also offers teachers of German abroad individual mobility grants.

Austria supports bilingual school projects in some non-German-speaking neighbouring countries, by offering assistance from Austrian teachers.

Belgium (Flemish Community), Germany, Spain, France, Croatia, Italy, Latvia, Austria, the United Kingdom, and Montenegro have introduced bilateral agreements to support transnational teacher mobility.

In Finland, in which internationalisation is an important aspect of education, as stated in the Education and Research 2011-2016 development plan ([5]), national subsidies are granted to projects that aim to internationalise schools and which often include a staff mobility component.

In the United Kingdom, teachers can take part in exchanges with Commonwealth countries through support provided by the Commonwealth Teacher Exchange Programme.

Eight Nordic and Baltic countries (Denmark, Estonia, Latvia, Lithuania, Finland, Sweden, Iceland, and Norway) are involved in the Nordplus Programme which supports their involvement in a variety of educational cooperation activities. Nordplus has several sub-programmes aimed at different target groups and fields of education. The Nordplus Junior Programme funds, among other things, transnational teacher mobility in lower secondary education.

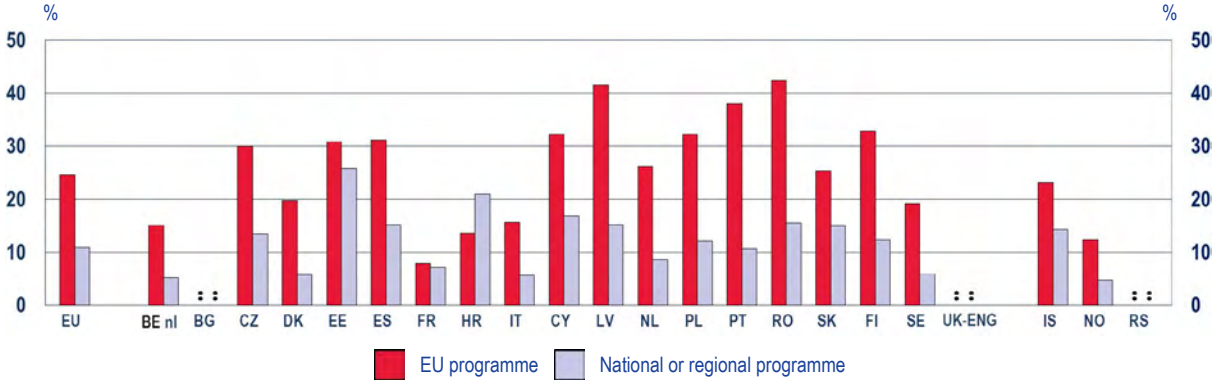
Participation

After having presented existing national top-level schemes for transnational mobility, it is interesting to observe the proportions of mobile teachers who report that they have taken part in them and/or in an EU programme. In the TALIS 2013 questionnaire, mobile teachers were asked two questions in this respect, namely whether they went abroad for professional purposes 'as a teacher in an EU programme (e.g. Comenius)' and/or 'as a teacher in a regional or national programme'. For this reason, no information is available concerning the participation in such programmes of trainee teachers during ITE.

Figure 4.7 shows that the EU programme is by far the main funding scheme. Almost a quarter of mobile teachers went abroad for professional purposes under the EU programme, compared to a tenth in the case of national or regional programmes. Within the EU, almost a quarter of mobile teachers did so with EU funding compared to one-tenth in the case of national or regional programmes. In a few countries, this trend was even more marked, with over three times more teachers going abroad on EU funding than with national or regional funding. This was the case in Denmark, the Netherlands, Portugal, and Sweden. Only in Estonia and France was the impact of both funding sources almost the same, although participation in both types of funding schemes was fairly high in Estonia, and low in France.

([5]) http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2012/liitteet/okm03.pdf?lang=en [Accessed 15 June 2015].

Figure 4.7: Proportion of teachers in lower secondary education (ISCED 2) who have gone abroad for professional purposes with the support of a mobility programme, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 4.7 in the Appendix).

Explanatory note

The Figure shows the distribution of teachers who have been abroad with the support of the EU programme and of those who did so with the support of national or regional programmes. Teachers may have used both types of programmes. They may also have been abroad without the support of these programmes.

Just 10.9 % of mobile teachers in the EU are supported by national funding. Only in Croatia was it reported that mobile teachers went abroad mainly as a result of such funding. However, the fact that Croatia is the country with the least mobile teacher population of all European countries surveyed (see Figure 4.1) and has only recently become eligible to join EU mobility programmes may account for the lower influence of EU funding on its transnational teacher mobility.

Several conclusions can be drawn from broad consideration of transnational teacher mobility rates (see Figure 4.1), the existence or otherwise of national top-level schemes for such mobility (see Figure 4.6), and the proportions of mobile teachers who have taken part in EU, and/or national or regional programmes.

First, the existence of a national top-level scheme will not necessarily result in a higher proportion of internationally mobile teachers. Half of the countries with a transnational teacher mobility rate below the EU average have national top-level mobility schemes, namely Belgium (Flemish Community), Croatia, France, and Italy. However, except in Croatia, the proportion of their internationally mobile teachers supported under this type of scheme is low (between 5.2 % and 7.1 %). A possible explanation is that the funds allocated to these schemes are too low. In the other half of countries with below-EU-average transnational teacher mobility and without national top-level schemes, the EU programme plays an important role. This clearly applies to Poland, Portugal, and Romania and, to a lesser extent, Slovakia.

The six countries with the highest teacher mobility for professional purposes (Estonia, Latvia, Finland, Sweden, Iceland, and Norway) are Nordic and Baltic countries which take part in Nordplus, a longstanding mobility programme funded by the Nordic Council of Ministers. Estonia is the country with the highest proportion of mobile teachers to have been supported by national or regional funding (25.8 %), while Estonia, Latvia, and Finland also have proportions of mobile teachers who have received EU funding, which are above the EU average.

4.6. Relative impact of certain factors

Focusing on the potential value of a particular factor in predicting the likelihood of transnational teacher mobility may misrepresent its real possible influence on mobility. Eleven factors identified in the TALIS 2013 survey were selected to test their predictive effect on transnational mobility, under the control of each other (see Figure 4.10). They relate to the following:

- gender characteristics: being a man;
- the subject taught: teaching a modern foreign language;
- employment criteria: teachers with the status of permanent employee; teachers who had completed more than 10 years in service; teachers who had worked in a city with a population of over 15 000;
- participation in professional development activities (CPD): teachers who had taken part in CPD activity in the preceding 12 months. Two potential barriers to participation in CPD, which could inhibit transnational mobility were also considered: time constraints due to family responsibilities and the costs of CPD;
- being satisfied with the job and approaches to teaching: adopting a collaborative approach; adopting a constructivist approach.

It would have been interesting to consider other predictive factors, such as the possibility of replacing teachers during their period spent abroad. However no data from TALIS 2013 was available on this subject.

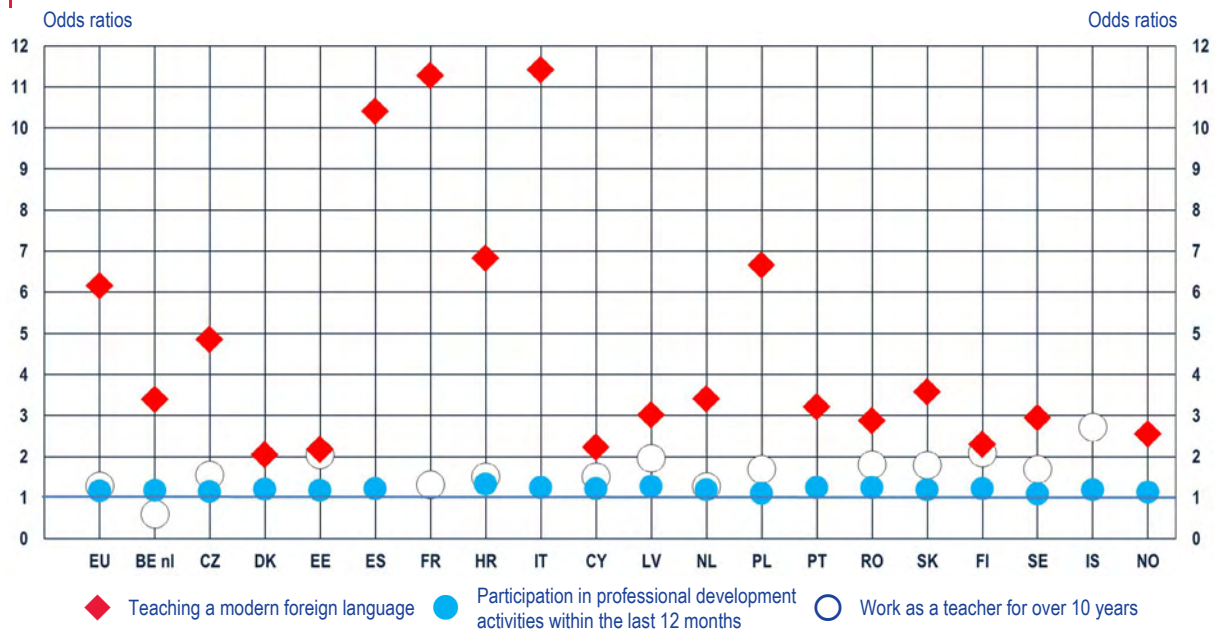
Examination of each of these factors under the control of all others, has suggested that three in particular have a strong predictive impact on mobility:

1. 'teaching a modern foreign language';
2. 'participation in professional development activities within the last 12 months';
3. 'work as a teacher for over 10 years'.

Figure 4.8 indicates the odds ratios of these three main factors, under the control of all 11 factors selected.

The main predictive factor for transnational mobility in all European countries surveyed by TALIS 2013 (except Iceland) is **'teaching a modern foreign language'**. Within the EU as a whole, teachers are around six times more likely to be internationally mobile if they teach a modern foreign language, and modern foreign languages is the subject area with the highest proportion of mobile teachers (see Figure 4.4). As already noted, Iceland is an exception given that its high transnational teacher mobility rate is not confined to any one subject in particular but equally reflected in all of them. In three countries, the likelihood of transnational teacher mobility for professional purposes is over ten times higher among teachers of foreign languages. These countries are Spain (with an odds ratio of 10.4), France (11.3), and Italy (11.4). This finding is reflected in Figure 4.4, showing that Spain has the highest proportion of mobile modern foreign language teachers. Modern foreign languages is also the only subject area in which transnational teacher mobility in France and Italy is above the EU average, although it is below the EU average in both countries for such mobility in all subjects combined (see Figure 4.1).

Figure 4.8: Main predictive factors in the transnational mobility of teachers in lower secondary education (ISCED 2) for professional purposes, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 4.8 in the Appendix).

Explanatory note

For explanation of multiple logistic regressions, see the Statistical Note.

This Figure shows the predictive impact on teachers' transnational mobility of each factor under the control of the 11 selected factors (see Figure 4.10).

The odds ratios associated with the predictive factors – see significant odds ratios in Table 4.8 in the Appendix – represent the increased likelihood of transnational teacher mobility according to the score for the question.

The factor which comes second in predicting transnational teacher mobility for professional purposes is '**participation in professional development activities in the last 12 months**' (see also Chapter 3). It has a much lower predictive value than teaching a modern foreign language but with an impact applicable to all European countries surveyed, except France. The odds ratio for the EU overall is 1.2. The predictive effect of this factor may be attributable to the possibility that transnational mobility can enable teachers to discover new approaches to teaching in practice, encouraging them to undertake CPD to enhance their own understanding and use of innovative teaching methods. The study by the European Parliament (2008, p. 118) on the mobility of school teachers in the EU stated that 'rather than participation being the sole outcome associated with participation on a mobility programme, […] participation leads to continuing professional development amongst many teachers post completion resulting in a better learning experience for students'.

'**Work as a teacher for over 10 years**' is a predictive factor for transnational mobility in two-thirds of the European countries surveyed in TALIS 2013. In countries in which this factor is statistically significant, teachers with over 10 years of experience in service are more likely to have been abroad for professional purposes. In Estonia, Latvia, Finland, and Iceland, the odds ratios for this are slightly higher, at between 2.0 and 2.6. However in Belgium (Flemish Community) the reverse trend is apparent. Teachers with *less* than 10 years of experience in service are more likely to be mobile (at an odds ratio of 1.7). This may be attributable to the fact that the mean age of the mobile teacher population in the Community is well below 40 years (36.6), in contrast to all other European education systems surveyed in which it is above 40 (see Table 4.2 in the Appendix).

Besides these three main predictive factors, four others have predictive value in between five and seven European countries out of the 19 that responded to the TALIS 2013 questions on transnational mobility.

This applies to '**being a man**'. Before examining this predictive factor, the distribution of men and women teachers according to TALIS 2013 data should first be considered briefly. The gender distribution shown in Figure 4.9 is given in terms of the two further criteria of whether or not teachers are mobile, and whether or not they teach modern foreign languages (bearing in mind that 'teaching a modern foreign language' is the strongest predictive factor).

Figure 4.9: Distribution of teachers in lower secondary education (ISCED 2) in the EU, according to the three criteria of transnational mobility, teaching of modern foreign languages, and gender, 2013

%	Language teachers		Non-language teachers	
	Mobile	Non-mobile	Mobile	Non-mobile
Women	10.1	7.5	9.5	42.2
Men	1.8	1.4	6.2	21.4

Source: Eurydice, on the basis of TALIS 2013 (see Table 4.9 in the Appendix).

Explanatory note

Teachers in lower secondary education (ISCED 2) may either be 'specialists' (who teach just one subject) or 'generalists' (who teach two or more), depending on the country concerned. Where at least one such subject is a modern foreign language, teachers have been included in the 'language teachers' group.

As shown in Figure 4.9, women teachers are more than twice as mobile as men teachers (with total mobility rates of 19.6 % and 8.0 % respectively). Thus when gender is the sole independent variable examined to explain mobility, being a woman appears to be a predictive factor. However when this factor is placed under the control of all others – and especially that of teaching a foreign language – the predictive factor becomes 'being a man' (see Table 4.8 in the Appendix). This is doubtless because, in the case of modern foreign language teaching, the proportion of mobile teachers by gender is almost the same (56.8 % for women and 56.3 % for men), whereas it is higher for men in other subjects taught, at 22.5 % compared to 18.4 % for women (see Figure 4.9). 'Being a man' is a predictive factor for transnational mobility in seven European education systems, namely Belgium (Flemish Community), the Czech Republic, Denmark, France, the Netherlands, Poland, and Slovakia, with odds ratios of between 1.2 and 1.7.

Figure 4.10 summarises the relative predictive impact of the 11 factors considered in this chapter.

Figure 4.10: Overview of the predictive effect of 11 selected factors on the transnational mobility for professional purposes of teachers in lower secondary education (ISCED 2), 2013

All countries = BE nl, CZ, DK, EE, ES, FR, HR, IT, CY, LV, NL, PL, PT, RO, SK, FI, SE, IS, NO

MAIN PREDICTIVE FACTORS (applicable to most countries)	
• Teaching a modern foreign language (EU odds ratio: 6.1)	Applies to **all countries** except IS
• Participation in professional development activities within the last 12 months (EU odds ratio: 1.2)	Applies to **all countries** except FR
• Work as a teacher for over 10 years (EU odds ratio: 1.3)	Applies to **13 countries**: CZ, EE, FR, HR, CY, LV, NL, PL, RO, SK, FI, SE, IS and to BE nl but with reverse trend

OTHER PREDICTIVE FACTORS (applicable to fewer countries)	
• Being a man	Applies to **7 countries**: BE nl, CZ, DK, FR, NL, PL, and SK
• Permanent employee status	Applies to **7 countries**: CZ, ES, NL, FI, SE, IS, and NO Also applies to IT but with reverse trend
• Time constraints due to family responsibilities are not regarded as a barrier to participation in CPD	Applies to **6 countries**: EE, FR, HR, PL, RO, and FI Also applies to DK but with reverse trend
• Working in a city (population of over 15 000)	Applies to **5 countries**: CZ, CY, PL, RO, and SK

FACTORS NOT RELEVANT
• Satisfaction with the job
• A collaborative approach to teaching
• A constructivist approach to teaching
• The costs of CPD are not regarded as a barrier to participation in it

Source: Eurydice, on the basis of TALIS 2013 (see Table 4.8 in the Appendix).

Explanatory notes

All countries: Refers here to the 19 European countries that took part in TALIS 2013, and also contributed to the questions on teacher mobility in the TALIS teacher questionnaire.

For explanation of multiple logistic regressions, see the Statistical Note.

This Figure shows the predictive impact on teachers' transnational mobility of each factor under the control of the 11 selected factors.

The odds ratios associated with the predictive factors – see significant odds ratios in Table 4.8 in the Appendix – represent the increased likelihood of transnational teacher mobility according to the score for the question.

'**Having a permanent employee status**' is a predictive factor for participation in transnational teacher mobility in the Czech Republic, Spain, the Netherlands, Finland, Sweden, Iceland, and Norway, with odds ratios of between 1.2 and 2.0. The predictive effect is a reverse one in Italy, in which teachers on a fixed-term contract are more likely to go abroad for professional purposes.

'**Not regarding time constraints due to family responsibilities, as a barrier to participation in CPD**' is also a predictive factor for participation in transnational teacher mobility in six countries, namely Estonia, France, Croatia, Poland, Romania, and Finland, with odds ratios of between 1.1 and 1.2.

'**Working in a city with a population of over 15 000 inhabitants**' is a predictive factor in the Czech Republic, Cyprus, Poland, Romania, and Slovakia. In the last three countries, the proportion of mobile teachers is lower than the EU average (see Figure 4.1). Teachers working in more rural areas in these countries may have less support in preparing applications to go abroad for professional purposes.

Factors relating to attitudes vis-à-vis the teaching profession (notably job satisfaction and a collaborative or constructivist approach to teaching) have no significant impact on transnational teacher mobility. The same applies to not regarding the costs of CPD as a barrier to participation in it. This factor is probably less significant than not regarding family time restrictions as a barrier to participation in CPD, because transnational teacher mobility is more often financially supported by mobility programmes.

CHAPTER 5: ATTRACTIVENESS OF THE TEACHING PROFESSION

Teacher shortages, especially in some subject area or particular geographical locations, represents a growing challenge for European education systems. In some countries, an ageing teacher population (see Section 1.1.2) and the overall perception of a diminished prestige of the teaching profession may enhance pressure on the systems. Monitoring teacher supply and demand as reflected in demographic and labour market trends, statistical projections and forecasts of future staff requirements may be the first step needed to stem teacher shortages.

In some European countries, the teaching profession has lost much of its power to attract the most promising prospective teachers. A recent report (European Commission, 2013) attributes this to a decline in prestige, deterioration in the working conditions of teachers, and their relatively low salaries compared with those of other intellectual professions. One way of enhancing the teaching profession may be to focus on the factors positively associated with, first, the professional satisfaction of teachers and their perception of how – and how far – society values their work and, secondly, their school environment and working conditions. As professional satisfaction normally leads to greater professional commitment resulting in better performance, examining the variables that affect satisfaction and the perceived value of teaching may be instructive in boosting the educational endeavour of teachers, the attractiveness of their profession, the quality of their teaching methods and the attainment of their students.

The first section of this chapter focuses on measures that may help decision-makers to balance the supply of teachers and the demand for them.

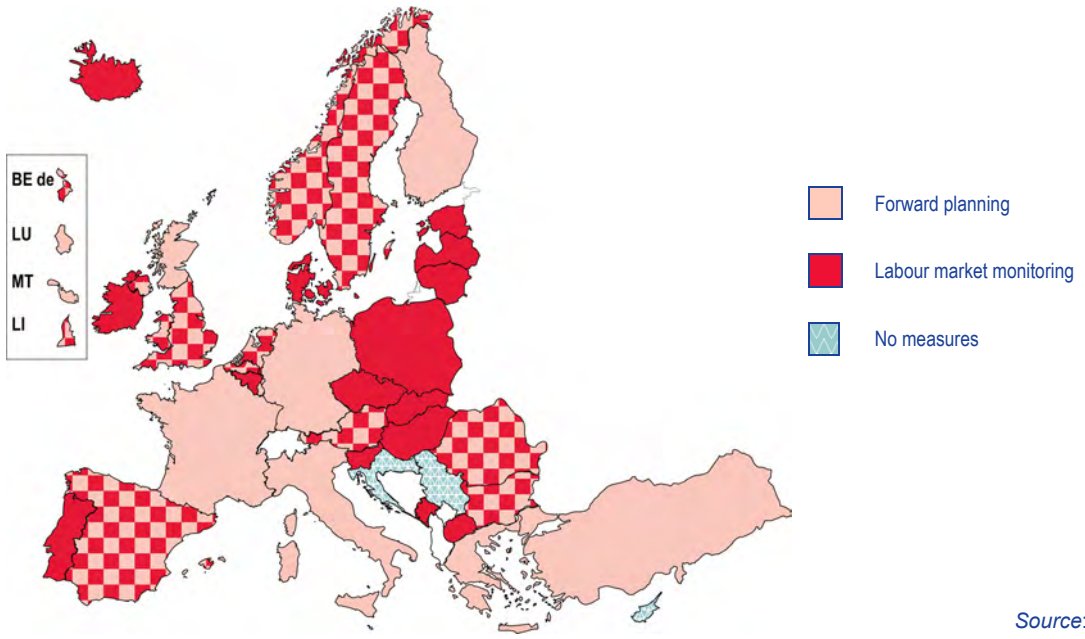
The second section provides an overview of variations in how far teachers are satisfied with their profession and then, on the basis of the TALIS 2013 survey, their view of how society values it. This section also contains an analysis of other surveys conducted in some countries on perceptions of how the profession is valued.

The third section provides examples of ‘attractiveness-enhancement’ campaigns that several countries have implemented to revitalise the image of the teaching profession. It also examines the relation between the school environment, certain working conditions, the professional satisfaction of teachers, and their own perception of the esteem with which their profession is held in society.

5.1. Monitoring teacher supply and demand

The effective monitoring of teacher supply and demand, as suggested above, calls for a sound analytical approach and accurate statistical projections. The great majority of European countries report that they have taken steps to help them forecast the supply of teachers and the demand for them. The only exceptions are Croatia, Cyprus, and Serbia.

Figure 5.1: Measures to monitor the balance in teacher supply and demand in general lower secondary education (ISCED 2), 2013/14



Source: Eurydice.

Explanatory note

Forward planning of teaching staff requirements is based on the observation of trends and the identification of the most likely scenarios in future teacher supply and demand. The data examined includes demographic projections such as birth rates and migration, as well as variations in the number of trainee teachers and changes within the teaching profession (the number of staff retiring, transfers to non-teaching posts, etc.). The forward planning of teaching staff requirements may be on a long-, medium- and/or short-term basis. This planning policy is developed either at national or regional level (or both) depending on the relative centralisation (decentralisation) of the education system concerned.
Labour market monitoring looks at general trends in the workforce, but is not related to official government plans. While it may provide decision-makers with insight into changes in teacher supply and demand, it cannot be regarded as official forward planning.

Country-specific note

Spain: Only some Autonomous Communities have developed processes for monitoring the labour market as regards teacher supply and demand.

Forward planning policies based on observation of the factors likely to influence teacher supply and demand may be of great help in enabling countries to anticipate possible teacher shortages or oversupply and take suitable measures. Twenty two European education systems practice forward planning to anticipate and meet the demand for teachers.

In the **Flemish Community of Belgium**, the Department of Education and Training has developed its *Arbeidsmarktrapport – prognose 2011-2015* ('Labour Market Report – Prognosis 2011-2015') based on a set of indicators including demographic data, the number of students in initial teacher education and the percentage of newly qualified teachers leaving the profession prematurely. This report provides a forecast of teacher supply over the five-year period concerned. A labour market barometer and monthly statistics on teacher supply and demand produced by the Agency for Educational Services provide additional information necessary to flesh out teaching staff requirement forecasts.

In **Germany**, the Standing Conference, an Assembly of Ministers of Education and Cultural Affairs in the *Länder*, devised a calculation model to estimate teacher supply and demand in different *Länder* up to 2025.

In the **Netherlands**, where personnel planning policies are developed at school level, the Ministry of Education, Culture and Sciences helps schools to balance teacher supply and demand by publishing an annual bulletin on trends in the education labour market.

The government in **Scotland** (United Kingdom) annually carries out a teacher workforce planning exercise, in consultation with an advisory group comprising representatives of the General Teaching Council for Scotland, the local authorities, teacher unions, and the universities. This exercise takes into account different variables such as pupil numbers and the number of teachers required, as well as those expected to leave or return to the profession in the coming year. It then calculates the student teacher intake required to fill the gap between supply and demand. At the end of this process, the Scottish government issues a letter of guidance to the Scottish Funding Council. It is a matter for the Council to determine the overall intakes and the distribution between universities ([1]).

Currently, 28 education systems in Europe use labour market monitoring to track the balance between teacher supply and demand, either on an independent basis or as part of official planning procedures.

In **Denmark**, trends in teacher supply and demand are monitored through annual reporting on the number of trainee teachers and teaching staff requirements in schools.

In **Poland**, the monitoring of teacher workforce needs is carried out at local, regional and central levels. School governing bodies have to create a local database on the demand for teachers and transmit this information annually to the regional and central education authorities as well as to the central database. In parallel, the School Education Information System gathers data on variables such as the age, employment status, educational level, work experience, and responsibilities of teachers, in order to enable monitoring of their employment structure.

In **Montenegro**, higher education institutions conduct a labour market survey for all professions at least once every five years to establish a list of professional skills required by the labour market.

National surveys, studies and research in the field of education are additional sources of information that can help decision-makers understand emerging trends and potential challenges. In addition to forward planning policies, labour market monitoring or statistics, some countries have recently completed national surveys, reports or research, which raise concerns about factors likely to lead to teacher shortage, such as ITE student dropout, or premature departures from the teaching profession. Some of this material also contains forecasts of teacher supply and demand.

In **Latvia**, research published in 2014 by the State Service of Education Quality showed that ITE students appeared to lack motivation to begin their career.

In **Sweden**, national surveys conducted by the teachers' union and Swedish public television in 2011 and 2012 highlighted the problem of student dropout from initial teacher training.

The Ministry of Education in **Montenegro** has recently conducted a survey on the current age structure of teachers, which includes a forecast of future demand for employed teachers.

5.2. The image of the teaching profession both within and beyond it

Forward planning policies and labour market monitoring are useful tools to forecast the demand and supply of teachers. However, if teacher shortages are a threat that can undermine European education systems, then understanding the elements that play a role in it goes beyond monitoring. Teacher perceptions of their profession and of the esteem in which it is held by society are two among other indicators that may directly influence the attractiveness of the profession. Understanding them might provide paths for pulling the best suitable candidates into teaching.

([1]) Donaldson, G., 2011. *Teaching Scotland's Future – Report of a review of teacher education in Scotland*. [pdf] Available at: http://www.gov.scot/Publications/2011/01/13092132/0 [Accessed 30 April 2015].

5.2.1. The TALIS international survey of teacher satisfaction and perceptions

In the TALIS 2013 survey, 90.2 % of teachers in the EU stated that they were satisfied with their job and 90.1 % with their school environment. However, only 18.4 % of teachers perceive their profession to be valued by society at large ([2]). Countries with the lowest percentage of teachers who believe that their profession is viewed positively are Spain (8.5 %), France (4.9 %), Croatia (9.6 %), Slovakia (4 %), and Sweden (5 %). Despite their perception that society does not rate it highly, the great majority of teachers themselves in these countries are highly satisfied both with their job and their school (see Table 5.1 in the Appendix). This demonstrates that their level of satisfaction on both counts is independent of their view of how society regards their profession, while job satisfaction and teachers' satisfaction with their school are correlated (r=0.50).

Impact of age, length of service, and gender

Neither the age of teachers nor the number of years completed in service influence teachers' sense of satisfaction with either their job or their school. The proportion of teachers who report overall satisfaction with their job varies little, either from one age group to the next, or with the number of years they have completed in service (see Tables 5.2.a, 5.2.b, 5.3.a and 5.3.b in the Appendix). However, the proportion of teachers who believe that their profession is valued by society falls sharply once they are aged 30 (see Table 5.2.c in the Appendix). In the EU, 29.6 % of teachers aged under 30 perceive their profession to be valued by society, compared to 19.8 % of those in the 30-39 age group. The percentage then decreases with the age of the population sampled, reaching 16.4 % in the 50-59 age group, although there is a slight percentage increase among those aged 60 plus.

When variations in the percentages of teachers in the EU who believe that society values their profession is examined with respect to the length of time spent in service, the trend is similar. The average percentage of 27.5 % among teachers who have worked for five years or less drops to 15.5 % in the case of those with 11 to 15 years of experience (see Table 5.3.c in the Appendix). Beyond 15 years of experience, the percentage changes little. The exceptions to this trend are in Belgium (Flemish Community), Cyprus, Denmark, Iceland, and Italy which all report similar percentages of teachers who believe that society values their profession, irrespective of the number of years they have completed in it.

The overall sense of satisfaction with the teaching profession and the school environment between men and women varies little: 90.5 % of the women teachers and 89.5 % of the men teachers are satisfied with their job, and 90.1 % of the women and 90 % of the men with the school (see Table 5.4 in the Appendix). Differences between them are nevertheless apparent in their perceptions of how far society values the teaching profession: At EU level, 16.9 % of the women teachers and 21.9 % of the men teachers believe that their profession is valued by society.

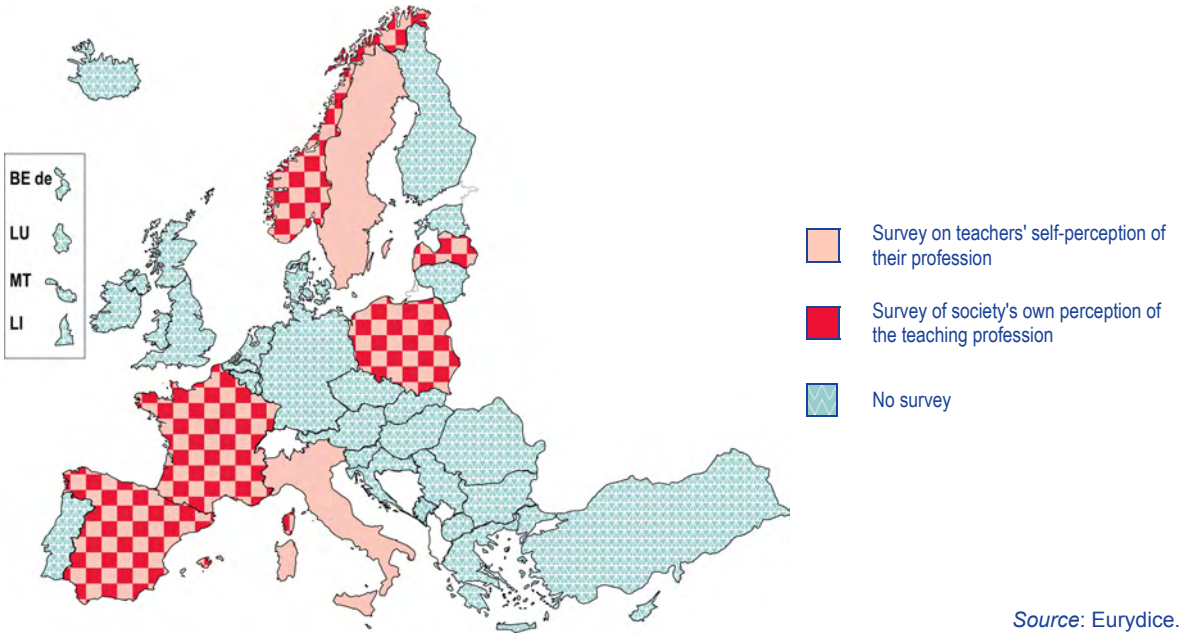
Overall, the satisfaction of teachers with their job varies little with age group, the time spent in service, or gender. However, their perception of how far it is valued by society does vary with each of the foregoing factors. As regards gender, it seems that, although men are in the minority among teachers in the EU, they are more likely to believe that society values their profession.

([2]) See the Statistical Note for reference on how teacher satisfaction with their school, job satisfaction, and perceived value of the teaching profession in society are calculated.

5.2.2. National and regional surveys of the social prestige of teaching

In seven countries, surveys have been conducted in Europe since 2010 to determine how society values the teaching profession. Those discussed here have been undertaken by a national body, but with either a national or regional focus. Figure 5.2 shows that these surveys have sought to assess both teacher perceptions of how society values the teaching profession and society's own perception of it (as expressed for example in the views of parents, students and others in society at large). Surveys have been carried out either by top-level education authorities, or by external bodies such as trade unions, independent researchers or research bodies, and private or public foundations. The population samples vary in size from 500 respondents, in the case of Spain, to larger samples of up to 16 000 respondents in the case of Italy. The surveys refer to either ISCED level 2 alone, or in combination with upper secondary or higher education.

Figure 5.2: National surveys conducted since 2010 on teachers' self-perception and society's perception of the teaching profession, 2013/14



Source: Eurydice.

In some surveys focusing on the perception of society at large, respondents were asked to rate the social prestige of teaching in relation to other professions. This is important as it sheds light on a society's value system. The surveys suggest that teacher perceptions of how society values the teaching profession are less positive than the verdict of society itself.

In **Spain**, society attributes the same social prestige to the profession as to other high-skill intellectual professions such as those of economists, lawyers, and psychologists, while in **Italy** teachers' social prestige is considered close to that of entrepreneurs and managers running medium-sized enterprises.

In **Latvia**, teachers are held in similar esteem to that of other public-sector professionals such as those in healthcare, the police, and fire prevention. However, only 1 % of parents surveyed in 2015 wanted their children to become teachers, fearing that they would suffer from the stress and low pay often associated with teaching.

Surveys on teachers' self-perception of their profession can help identifying the elements that might have an impact on their job satisfaction.

In the **Flemish Community of Belgium** in 2013, the Agency for Educational Services reported that stress due to a heavy workload was one of the main reasons teachers went on sick leave.

A research foundation in **Italy**, which interviewed 16 000 teachers, points out that 70 % of them stated that one reason for dissatisfaction with their job was the belief that their profession was not valued by society.

In a survey carried out in 2013, the **Latvian** Trade Union of Education and Science Employees said that low pay and excessive workload were strongly linked, as teachers did a lot of overtime in order to earn more money. However, they derive a sense of satisfaction from the personal rewards of working closely with children and performing a socially meaningful role.

On the other hand, a 2012 Stockholm University survey noted that high stress levels and the risk of burnout experienced by **Swedish** teachers accounted for their own low perception of their profession.

A similar finding was contained in a 2014 survey commissioned by the **Scottish** Education Trade Union, which highlighted the stress caused by an increasingly heavy workload and its adverse impact on teacher health and wellbeing. In this survey, needless paperwork in particular was cited as curtailing the time available for classroom teaching and learning activity, which is a major source of teacher satisfaction. Only 22 % of the 7 000 teacher respondents felt that they achieved a good balance between their professional and personal commitments.

The following details concern national surveys conducted in France and Poland.

A survey of how teachers themselves view their profession was conducted in **France** in 2013, covering a sample of 499 teachers aged under 35 who worked at ISCED levels 1, 2 and 3. It reported that half of the respondents were frustrated with their job and only one quarter were positive about their profession. Low levels of job satisfaction were primarily due to the lack of economic and symbolic recognition (social recognition, career prestige, positive media coverage) and of career advancement possibilities. The second source of frustration was with general working conditions, followed by organisational issues such as the high frequency of reforms, lack of consultation on school developments, lack of general resources, and – in the case of a quarter of respondents – lack of appropriate training. On the other hand, in 2012 a survey of 1 007 French residents aged over 18 found that eight in every 10 respondents had a positive image of the teaching profession, while 77 % of respondents stated that teachers deserved better social recognition. A similar proportion of them believed that the profession offered good prospects and would be proud if their children became teachers.

A survey in **Poland** in 2013 asked 904 adult residents to specify the social recognition they attributed to 30 professions covering a broad spectrum of skills and intellectual requirements. The teaching profession occupies one of the highest ranks among other most respected professions such as fire-fighter, university professor, followed by construction worker, nurse, and medical doctor. This suggests that professions that serve society and contribute to the common good are highly esteemed by Polish people. A separate study in the same year found that, while a large majority of teachers thought they had an excessive workload and risked burnout, they experienced great satisfaction from communicating with pupils and colleagues and from their sense of personal professional development.

These surveys are different in nature and sample and should not be compared; however, they do highlight that satisfaction and perception of value are intrinsically linked to working conditions and the working environment.

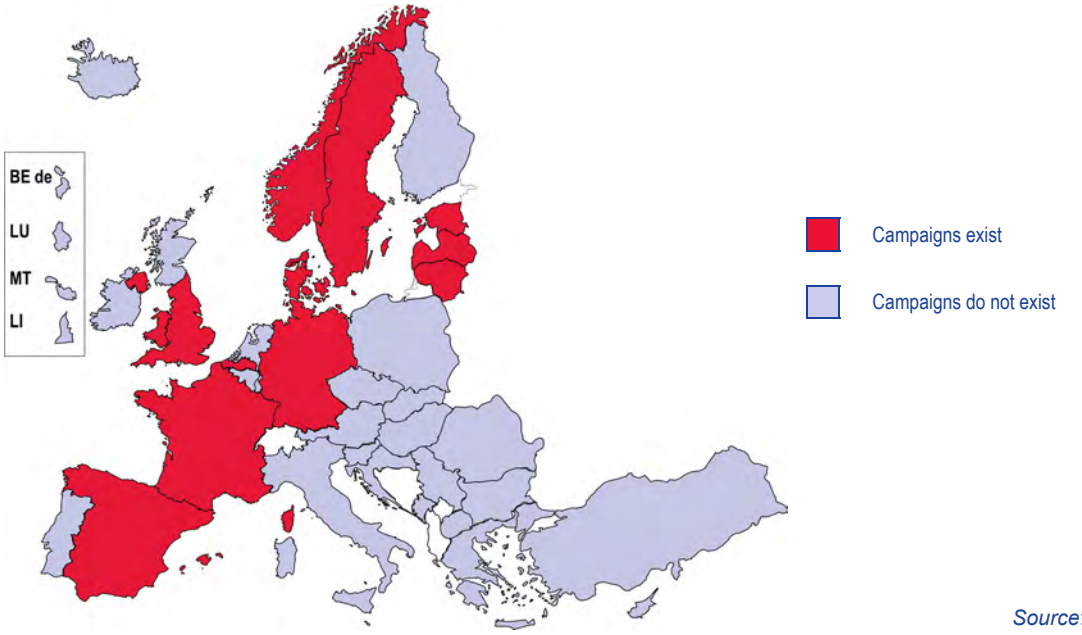
5.3. Enhancing the image of teaching

A dozen countries have implemented – or are currently implementing – campaigns to enhance the image of the teaching profession. The focus of interest herein are campaigns aimed specifically at improving the social prestige of the profession, rather than campaigns promoting material changes to the profession such as salary, working hours, teacher trainings, or other contractual conditions. Besides efforts to revamp its image by means of attractiveness-enhancement campaigns, the present section also highlights other aspects that might play a role in enhancing attractiveness. By understanding the positive impact the conditions and environment alike can have on both their job satisfaction and the social prestige of the profession, it may be possible to identify ways of increasing its attractiveness and the commitment of teachers to it.

5.3.1. Attractiveness-enhancement campaigns

The campaigns considered here and shown in Figure 5.3 are solely media-based operations – including those run over the Internet – which aim to enhance the social prestige of the teaching profession. They may be part of a global strategy or programme, or one-off initiatives. In general, they pursue at least one of the following aims: a) general promotion of the teaching profession; b) attracting new recruits to teacher training and – in the case of newly qualified teachers – to the profession itself; and c) encouraging in-service teachers to remain in the profession or former teachers to re-join it.

Figure 5.3: National or regional campaigns to attract new recruits to the teaching profession, 2013/14



Source: Eurydice.

Whereas in France, the United Kingdom (England), and Norway, campaigns are currently targeting prospective entrants to teacher training, in Denmark, Estonia, Latvia, Lithuania, and Sweden, they are aimed at a broader public. For example, the national education programmes *Iespējamā Misija* ('Mission Possible') in Latvia, or 'I choose to teach' in Lithuania, seek to attract into the teaching profession both university graduates and people considering a career change. Countries may also use campaigns to improve the gender balance in teaching by attracting more men into the profession (as in Denmark and Sweden), to promote cultural diversity within it by targeting suitable recruits with a migrant background (Denmark), or to attract nationals who have returned home after living abroad (Latvia).

In countries with systematic approaches to increasing the attractiveness of the teaching profession, media campaigns are often part of more general programmes or initiatives.

In **Estonia,** an information campaign *Õpi õpetajaks* ('Study to become a teacher') was launched in 2014 under the Development Programme for Education Sciences and Teacher Training 2008-2015. Supported by the European Structural Funds, this action seeks to boost the prestige of the teaching profession. It contains video clips of celebrities sharing their school memories, children talking about their teachers and teachers explaining why they like the profession.

In **Norway**, the GNIST ('SPARK') professional platform was established in 2009 as a partnership between the government, school providers, the teacher unions, school leaders, and student organisations. The programme aimed to strengthen the quality of the education system as a whole and improve the image of the teaching profession. It also included a recruitment campaign conducted between 2009 and 2014. Promotional video clips to attract recruits into teacher training were broadcast annually over the Internet from 15 March to 15 April, by when candidates had to submit their application.

Other countries have organised one-off initiatives such as *ad hoc* advertising campaigns over a limited period, in order to prevent teacher shortages or boost the image and recognition of the teaching profession.

In **Spain**, campaigns have been conducted in the Autonomous Communities. For example, in 2010, the Community of Madrid ran a five-week media campaign with the slogan 'Let's respect and support our teachers', while the region of Andalusia also ran a campaign in 2011 with the slogan 'Behind every person there was one day a great teacher'. In 2014, the Basque Country devised a similar campaign called 'I am a teacher'.

In January 2015, the **French** government launched an advertising campaign to encourage the recruitment of teachers. A video clip with the message *Rejoignez-nous* ('Join Us') was broadcast on 24 national TV channels and shared on social media.

In **Latvia**, in February 2015, the social campaign *Kurš mācīs rīt?* ('Who will teach tomorrow?') sought to promote the teaching profession and motivate young people to choose a career in it. The campaign broadcast advertising films in the media (TV and the Internet) and included several outdoor initiatives such as posters and advertisements on public transport.

In Sweden and the United Kingdom (England), promotion campaigns have been largely Internet-based.

In **Sweden**, the *För det vidare* ('Pass it on') campaign is designed as a web page hosted on the website of the Swedish National Agency for Education. It contains general information on the teaching profession and introduces new opportunities for ITE. Several videos present young celebrities (artists, actors, writers, etc.) telling stories about teachers who meant something special to them, teachers and trainee teachers explaining why they have chosen to go into teaching, and comedians doing replacements in science lessons. The website also enables those wishing to become teachers to do an online test whose results can help them understand which teacher education programme is likely to suit them best, in the light of the subjects they will teach at a particular educational level.

In the **United Kingdom (England)**, the 'Get Into Teaching' website provides information about how to apply for teacher training, the literacy and numeracy skills tests which must be passed before starting to train, and the funding arrangements that exist for trainee teachers.

Most of the campaigns are designed to attract teachers of all subjects and for all geographical areas. However, a few focus on specific subjects, such as the recruitment campaign 'Teaching in Brussels' launched by the Flemish Community of Belgium in Brussels, in response to the shortage of Dutch-speaking teachers, or the above-mentioned Swedish 'Pass it on' recruitment campaign mainly meant to attract teachers specialising in natural sciences and technology. Although the campaigns described here are likely to enhance the attractiveness of the teaching profession, only Denmark, Latvia, and Sweden have assessed their impact.

5.3.2. Working environment

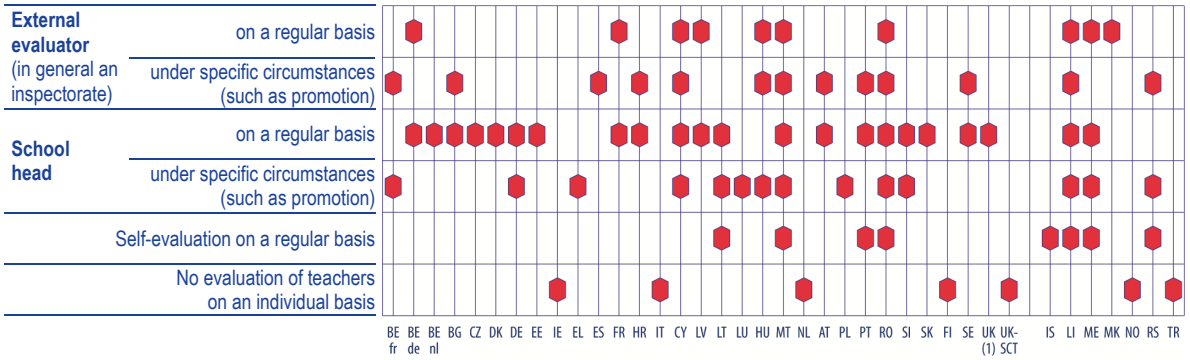
The working or school environment of teachers has an impact on teachers' satisfaction and their view of how society perceives their profession. Hence, besides attractiveness-enhancement campaigns, policy-makers may also consider improvements to in-school factors to revitalise the image of the profession, and recruit and retain teachers. The three facets of the environment analysed here are the evaluation of teachers, in-school collaborative culture, and teacher/student relationships. The impact of each element is assessed in relation to the satisfaction of teachers with their job and with their school, and their perception of social attitudes to their profession.

The evaluation of teachers

The 2012 Communication from the European Commission 'Rethinking Education' emphasises that well-resourced continuing professional development for teachers should include provision of regular feedback and support from teacher educators. This feedback and appraisal can be used to recognise

the strengths of teachers and encourage them to address weaknesses in their teaching methods. Such support also boosts their social self-esteem. Figure 5.4 illustrates the various kinds of evaluation that teachers may undergo in different countries. Evaluation may be conducted by the school head or an external evaluator on a regular basis or under specific circumstances, and may also involve self-evaluation on the part of the teachers concerned.

Figure 5.4: Responsibility for the evaluation of individual teachers in general lower secondary education (ISCED 2), according to central regulations, 2013/14



Source: Eurydice.

UK (1) = UK-ENG/WLS/NIR

Country-specific notes

Spain: Teachers in the Autonomous Community of Catalonia are evaluated by the school head on a regular basis, as well as by the external evaluator.
Italy: Teachers are evaluated once in their career – at the end of the probationary period.
Latvia: Quality performance levels range from 1 to 5. Levels 1 to 3 are assessed within the school, level 4 by municipal officials, and level 5 by the Ministry of Education and Science.
Hungary: A new grading system has been established since September 2013. There are three successive categories a teacher can be promoted to after the first level of Probationary Teacher, namely Teacher I, Teacher II, and Master Teacher. Following completion of at least six years at Teacher I level, they can request an external evaluation to progress to Teacher II level. In any event, they always undergo an external appraisal after nine years at this level. Those wishing to be Master Teachers can apply to go through the qualification procedure supervised by an external body, on condition that they have passed the postgraduate professional examination and have at least six years of experience at Teacher II level.
Turkey: The annual evaluation of teachers by school heads is compulsory under a new regulation with effect from 2015.

Some form of centrally regulated individual teacher evaluation exists in all countries except Ireland, Italy, the Netherlands, Finland, the United Kingdom (Scotland), Norway, and Turkey. In these countries, however, schools can be free to organise their own teacher development practices.

Ireland does not appraise individual teachers. However, schools are subject to centrally regulated evaluation systems (European Commission/EACEA/Eurydice, 2015).

In the **Netherlands**, despite the absence of a central regulation, teachers have regular performance interviews with their school heads or other management staff.

Finland is distinctive in that 'development discussions' are not evaluations of past performance but agreements centred on forward-looking improvement measures.

The norm in the **United Kingdom (Scotland)** is that line managers hold an annual professional review and development meeting with teachers during which a Career-Long Professional Learning (CLPL) plan is agreed on the basis of a needs assessment. Teacher contracts include up to 35 hours a year for CLPL, in addition to overall working hours. Teachers are thus supported to evaluate their own professional learning and practice in dialogue with their line manager.

In **Turkey**, it is normal practice for the school head to conduct a performance review in case of a complaint against a teacher (by someone internal or external to the school).

The lack of a centrally regulated evaluation system gives schools more freedom to assess teachers in ways and at intervals that school heads deem most appropriate. This might either lead to a situation in which teachers lack feedback and guidance on ways to improve their teaching methods or, on the

contrary, result in a flexible appraisal system individually suited to the teacher. Furthermore, staff management and teaching quality monitoring become the sole responsibility of school heads, rather than responsibility shared with the school administrative authorities.

In most countries with an evaluation system, the school head is responsible for appraising teachers, either regularly or under certain circumstances, such as a change in their employment status, decisions on whether to promote them, or their use of problematic teaching methods.

In **Greece**, teachers are only evaluated by school heads at the end of their probationary period to assess whether they can be appointed with career civil servant status.

In **Hungary**, school heads can, if necessary, initiate an evaluation of teaching in general or individual teachers at their school. However, such evaluations are supplemented by external appraisals either every five years, or at the request of teachers, at intervals that depend on their grade. In addition, regulations in Hungary require that, prior to promotion, teachers compile a self-evaluated portfolio tracking the development of their skills and professional achievements.

While evaluations in **Poland** are not performed on a regular basis, the school head, the regional authority, the school governing body, the school council, the parents' council or the teachers themselves (though not trainee teachers) can request an evaluation at any time over a year after the previous one. In such cases, evaluation is always performed by the school head.

In **Serbia**, evaluations can either be carried out by the school head in the case of applications for promotion, or by an external evaluator when there are reasons for believing that a teacher is underperforming. Emphasis is, however, placed on teachers' self-evaluation of their continuing professional development (CPD) plans.

In 17 education systems, appraisal is conducted by an external evaluator on a regular or ad hoc basis. In all of them, except in Spain (in almost all Autonomous Communities) and the former Yugoslav Republic of Macedonia, this external evaluation is supplemented by the school head. This ensures that the evaluation of teachers is also based on the opinion of the person most responsible for ensuring the quality of their daily work. Teacher self-evaluation is carried out in eight countries, in all of which except Iceland it is combined with other evaluation methods.

In some countries, teacher performance review is linked to pay increases. While teachers in the United Kingdom (England and Wales) formerly received annual pay increments almost automatically, subject to satisfactory appraisal, all pay increases since 2014 have been linked to their individual performance. Northern Ireland has retained the system whereby teachers' salaries progress systematically every year on the main pay scale. In Latvia and the Autonomous Community of Asturias in Spain, positive performance reviews also lead to financial reward. In France, a positive performance review may lead to an accelerated scaled salary progression In Sweden, individual evaluations of teachers and their level of responsibility are taken into account when the school head and teacher union representatives negotiate their salaries. In other countries, such as Luxembourg and Hungary, teachers are evaluated when eligible for promotion and an attendant pay rise.

Evaluation output

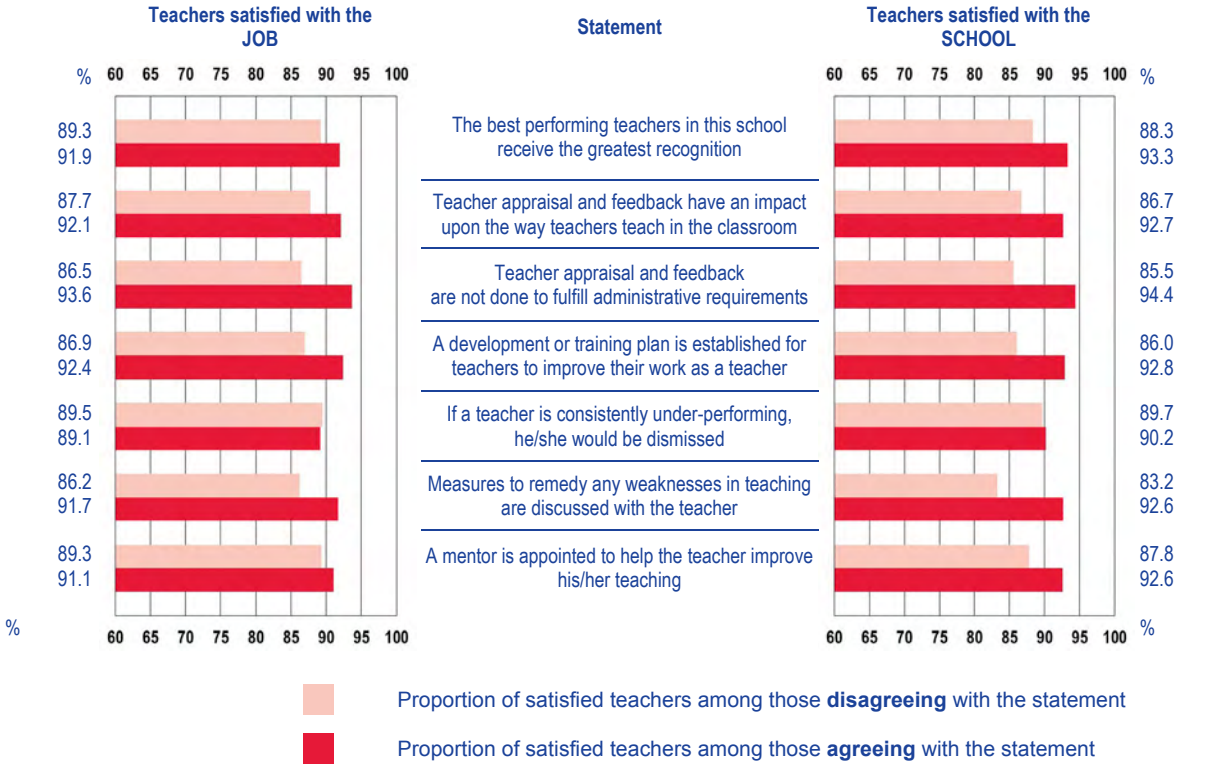
This section considers how far teachers' perception of the outcome of evaluation influences their satisfaction with their job and the school, and affects also their view of how far the former is valued by society.

Teacher satisfaction

The TALIS 2013 questionnaire asked teacher respondents to state whether they agreed or disagreed with seven possible evaluation (appraisal and feedback) outcomes applicable to their school. Outcomes could be financial in terms of rewards or job security, or non-financial and linked to teaching practices, training plans, the appointment of a mentor, or measures to remedy teacher weaknesses.

Figure 5.5 illustrates that, in the EU, agreement with these outcomes appears to be related to an increase in the proportion of teachers who say they are satisfied or highly satisfied with their job and school environment. The only exception is that the likelihood of a consistently underperforming teacher being dismissed does not seem to influence satisfaction. This might be because in many education systems teachers are granted tenure. The existence of tenure means that substantial evidence for professional incompetence or misconduct is required for termination of their contract, which is the responsibility of a public authority rather than the school. The risk of dismissal is therefore not usually related to appraisal or feedback, or indeed to satisfaction with the job or the school.

Figure 5.5: Proportion of teachers in lower secondary (ISCED 2) education who express job satisfaction and satisfaction with their school, in relation to perceived evaluation (feedback) outcomes, EU level, 2013



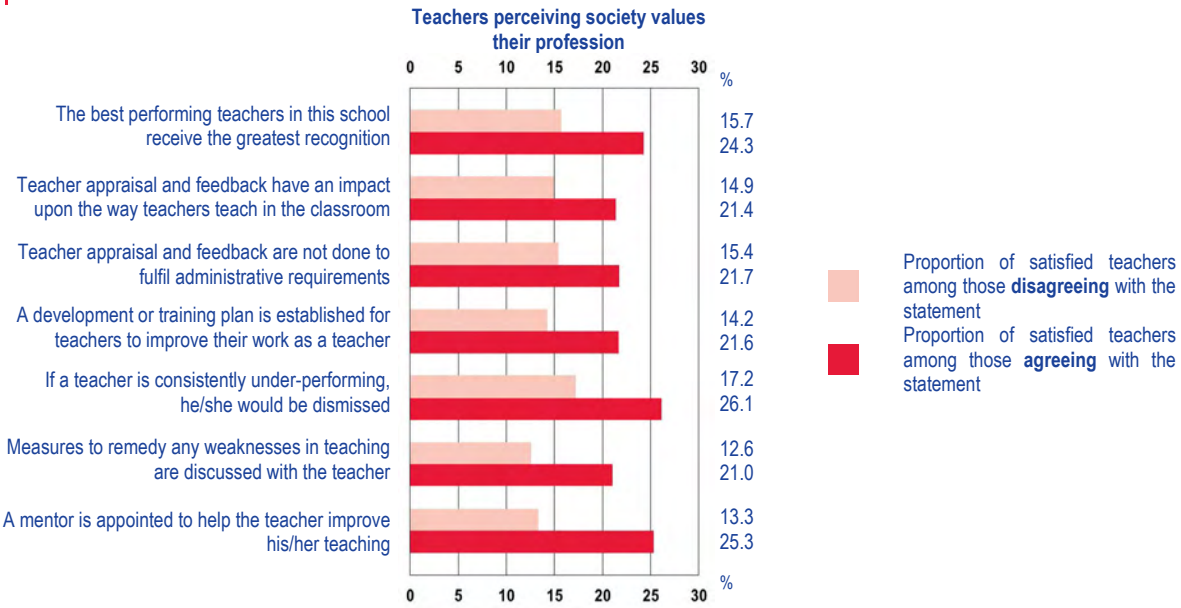
Source: Eurydice, on the basis of TALIS 2013 (see Tables 5.5.a. and 5.5.b. in the Appendix, which include data by country).

Among the possible evaluation outcomes, three have the most meaningful impact on teacher satisfaction with their job and school. The perception that evaluation is not just an administrative task, but relevant and helpful to them, is the evaluation outcome with most impact on the perception of job satisfaction (7.1 percentage points), and satisfaction with the school (8.9 percentage points). Next come the perceptions that evaluation may lead to improved teaching methods, to remedy weaknesses, and to establish development or training plans.

Teachers' view of how society values their profession

Given that the proportion of teachers in the EU who consider that society values their profession is low (18.4 %), it is instructive to highlight the factors that may help to increase it. Figure 5.6 suggests that, in acknowledging that evaluation has any of the listed outcomes, teachers are more likely to believe that society values their profession. Evaluation that leads to development or training plans and helps teachers improve their classroom practice, all reinforce the idea that the teaching profession is valued.

Figure 5.6: Proportion of teachers in lower secondary (ISCED 2) education who consider the teaching profession to be valued in society, in relation to perceived evaluation (feedback) outcomes, EU level, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 5.5.c in the Appendix, which includes data by country).

Where the appointment of a mentor to help teachers is, in their view, a probable outcome of evaluation, it is the one most likely to have an impact on their perception of how their profession is rated by society: 25.3 % of teachers who think that the foregoing outcome is likely, consider that society values the profession, as opposed to 13.3 % who regard this outcome as improbable. While the risk of dismissal as a perceived outcome of evaluation does not significantly impinge on the job satisfaction of teachers, it comes second among outcomes most likely to influence their perception of how their profession is socially rated. The link between underperformance and risk of dismissal increases by 8.9 % the proportion of teachers who believe that society values the profession.

Table 5.5.c in the Appendix reveals that relations between variables identified for the EU as a whole do not apply in some countries. For example, respondents in Denmark, Cyprus, and Finland who think that a probable outcome of evaluation will be the dismissal of consistently underperforming teachers, will not tend to alter their perception of how far society values teaching. Neither will respondents in France for whom the corresponding likely upshot of evaluation is the appointment of a mentor, be inclined to change their perception of the social rating of the profession.

In general terms, the job satisfaction of teachers and their perception of how society rates their profession are positively affected when they believe that evaluation will affect them beneficially by helping them improve their teaching methods and skills. The belief that this will probably involve the appointment of a mentor is – out of all factors examined here so far – the expected outcome of evaluation most likely to influence their perception of the social standing of teaching. While recognition in terms of financial rewards or extra responsibilities also increases teachers' perception of society's verdict on their profession, its impact is not as decisive.

Collaborative culture

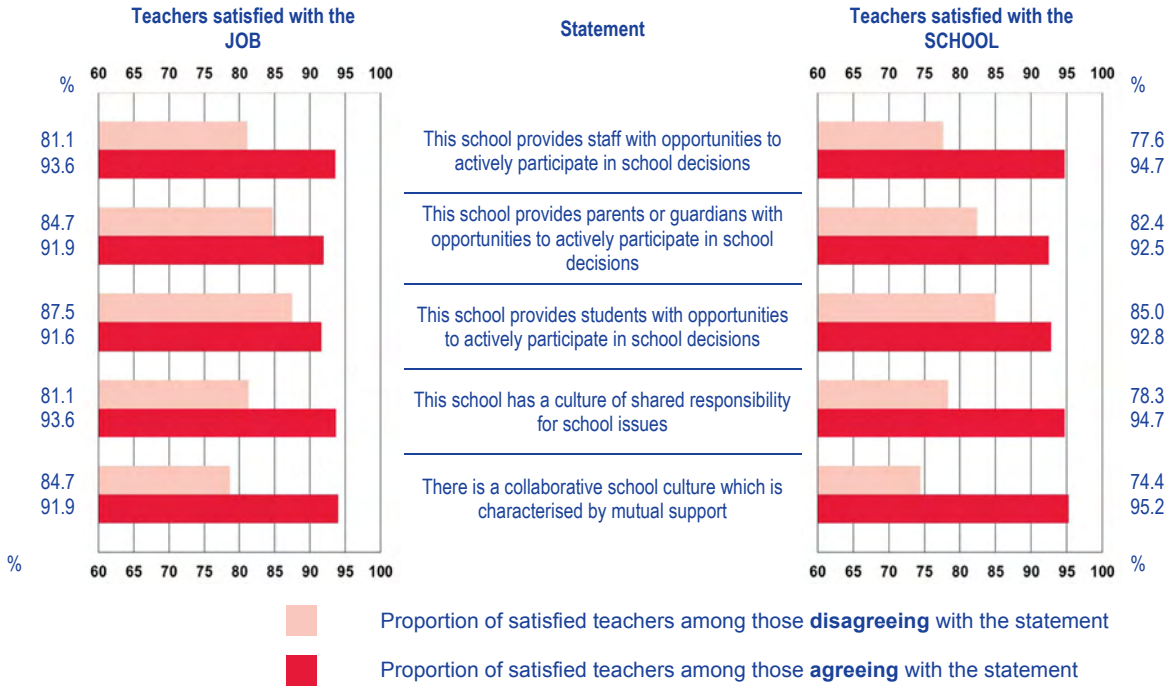
A collaborative culture in school may positively affect the motivation of teachers, the effectiveness of their teaching, and their job satisfaction. To determine how different kinds of mutual support may influence their satisfaction and their view of the social rating of teaching, these variables have been related.

Teacher satisfaction

Figure 5.7 shows that collaborative practices (as defined by the questions in the TALIS 2013 survey listed in the Figure) in schools may have a moderate or strong bearing on the satisfaction of teachers with their job and the school environment. More teachers seem to be satisfied in a system in which staff, parents, and students play an active part and have a say in the running of the school, and in which they themselves can help school management and vice versa.

While all collaborative practices thus tend to increase satisfaction, a school culture involving mutual support – both among teachers and between them and the school head – has the strongest potential impact on their job satisfaction. This is followed by the opportunity for staff to take an active part in school decision-making. While all countries report positive relations between these variables, the links appear to be strongest in the Czech Republic, Estonia, Croatia, Cyprus, Romania, the United Kingdom (England), and Serbia (see Tables 5.6.a and 5.6.b in the Appendix).

Figure 5.7: Proportion of teachers in lower secondary (ISCED 2) education who express job satisfaction and satisfaction with their school, in relation to types of collaborative practices, EU level, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Tables 5.6.a and 5.6.b in the Appendix, which include data by country).

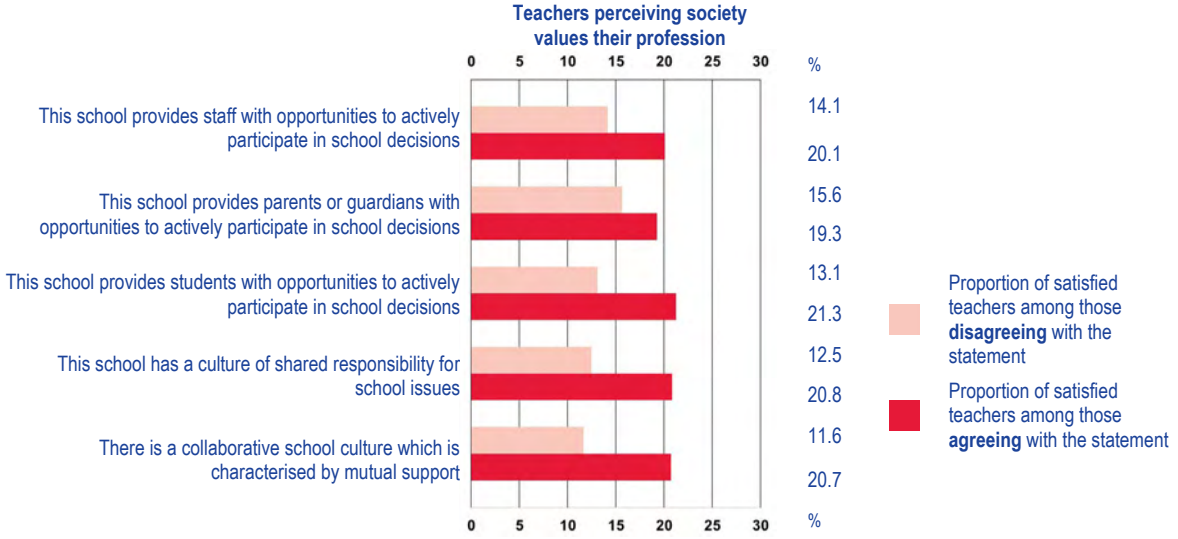
Teachers' view of how society values their profession

Figure 5.8 shows that various collaborative practices in schools tend to raise the perception among teachers that their profession is socially prestigious.

While all forms of decentralised school leadership are conducive to more positive teacher perceptions of the social value of the profession, the Figure reveals that a collaborative school culture characterised by mutual support has the strongest positive effect on these perceptions, followed by the presence of a culture of shared responsibility for school issues. Yet the influence of both factors is almost the same, increasing the number of teachers who believe that society values their profession by an EU average of around 8.7 percentage points in each case.

While there is no country in which both supportive approaches do not have at least some impact on these perceptions on the part of teachers, Belgium (Flemish Community), Bulgaria, Latvia, the Netherlands, Romania, the United Kingdom (England), and Serbia are the countries in which the perceptions tend to be enhanced most readily by both the foregoing cultures of mutual support and shared responsibility respectively.

Figure 5.8: Proportion of teachers in lower secondary (ISCED 2) education who consider the teaching profession to be valued in society, in relation to collaborative practices, EU level, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Tables 5.6.c in the Appendix, which also includes data by country).

Unsurprisingly, the practice of collective school leadership involving a culture of shared responsibility and decision-making among mutually supportive teachers and school heads may have a powerful impact on the job satisfaction of teachers and their view of how society values their profession. This collaborative outlook may also lessen any sense of isolation, reinforcing their belief that they are valued members of the school and society, thereby increasing their commitment to the common good.

Teacher-student relations

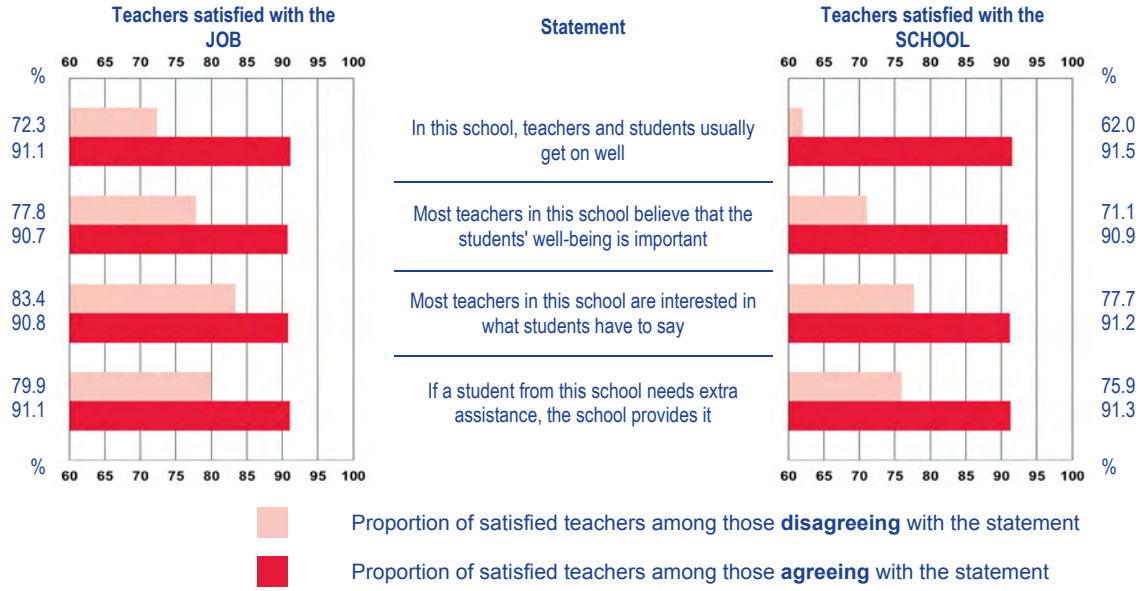
Another facet of the school environment is the quality of the relations between teachers and their students. The TALIS 2013 survey included several questions about this.

Teacher satisfaction

Figure 5.9 shows how, in the EU, agreement with any of the four statements listed is liable to increase the satisfaction of teachers with their job and their school environment. This is to be expected, as they are more likely to find the bond they form with their students rewarding.

Teacher satisfaction with their job and school is most positively associated with the perception that they and their students usually get on well. In fact, this aspect of the quality of the relations between them tends to influence the job satisfaction of teachers more powerfully than any other variable in their school environment as examined here.

Figure 5.9: Proportion of teachers in lower secondary (ISCED 2) education who express job satisfaction and satisfaction with their school, in relation to their view of teacher-student relations, EU level, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Tables 5.7.a and 5.7.b in the Appendix, which include data by country).

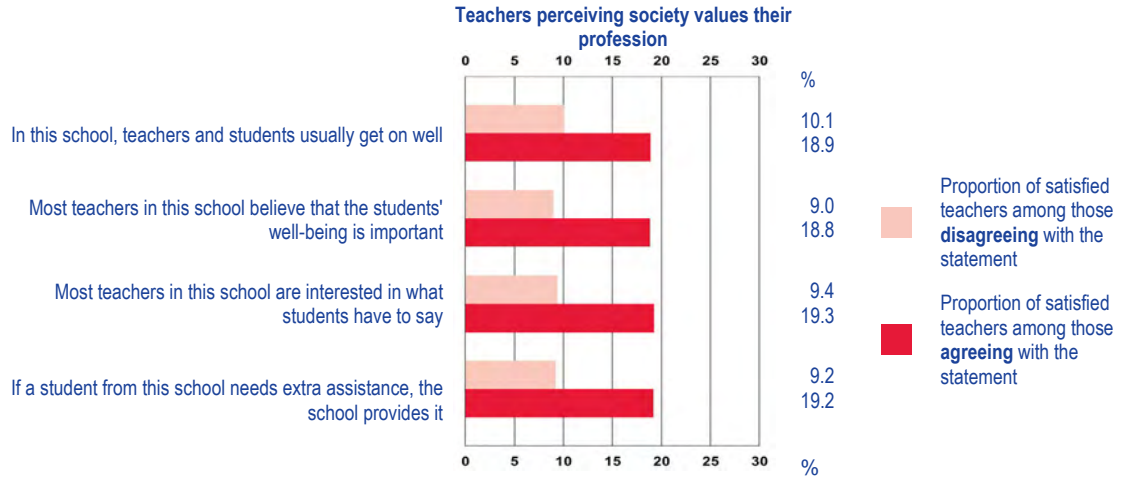
While the level of job satisfaction of teachers in all countries is positively related to the perception that they usually get on well with their students in school, the relation is strongest in the Czech Republic, Cyprus, the Netherlands, Romania, the United Kingdom (England), and Norway (see Tables 5.7.a and 5.7.b in the Appendix).

Teachers' view of how society values their profession

Figure 5.10 is concerned with how, in the EU, recognition of each of the four statement listed has virtually the same effect on teacher perceptions of the social prestige of teaching.

Agreement with each of the criteria tends to increase by 10 percentage points on average the proportion of teachers who believe that society values their profession. While identification with all four statements has a positive impact on these teacher perceptions in all countries, differences exist between countries, with the impact strongest in Belgium (Flemish Community), Denmark, Cyprus, Romania, Finland, and the United Kingdom (England).

Figure 5.10: Proportion of teachers in lower secondary (ISCED 2) education who consider the teaching profession to be valued in society, in relation to their view of teacher-student relations, EU level, 2013



Source: Eurydice, on the basis of TALIS 2013 (see Table 5.7.c in the Appendix which includes data by country).

5.3.3. Working conditions

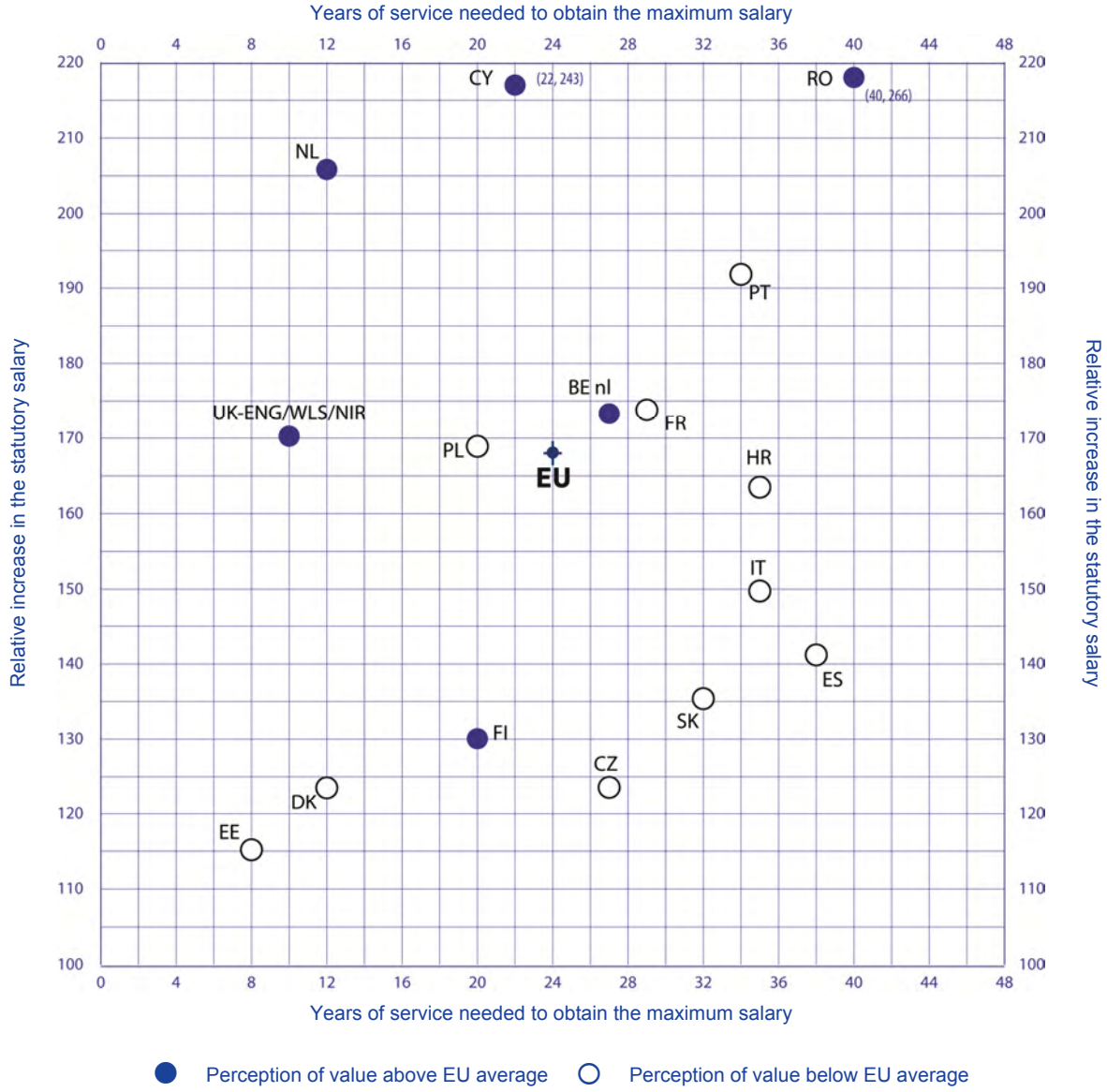
Additional means of attracting and retaining teachers may focus on improving their working conditions. This section discusses whether their job satisfaction and perception of how society rates teaching are influenced by the following regulations (Eurydice data): employment status, working hours, basic statutory salary and the length of service required to earn the maximum statutory salary.

Employment status, first of all, appears to have little bearing on the job satisfaction of teachers. In Europe, over 90 % of respondents to TALIS 2013 said they were satisfied with their profession regardless of whether they had 'contractual', 'civil servant', or 'career civil servant' status (see Chapter 1, section 1.2.1). As to their view of how society values their profession, there is insufficient data to suggest that it might be conditioned by employment status.

As regards contractually specified working time (see Chapter 1, section 1.2.2), it is impossible to identify conclusively a relation between the job satisfaction of teachers and the existence of centrally regulated total working time, time available at school, or teaching time.

While the basic statutory salary of teachers is not normally related to contractually specified total working time, availability hours, or teaching time, the evolution of salary levels in relation to years of service can have a relation with teachers' perception of the value given by society to the profession. Figure 5.11 shows the number of years required to earn the maximum basic statutory salary in each country. The Figure also highlights those countries in which the percentage of teachers believing their profession is valued by society is below or above the EU average.

Figure 5.11: Relation between the relative increase in statutory salaries in general lower secondary education (ISCED 2), the length of service needed for teachers to earn the maximum salary, and their perception of how society values their profession, 2013/14



Source: Eurydice. For perception of value: Eurydice, on the basis of TALIS 2013 (see Table 5.8 in the Appendix).

Explanatory note

The figure shows only the countries having participated in TALIS 2013. The EU average however is calculated on the basis of all Eurydice countries for which information was available (see European Commission/EACEA/Eurydice, 2014b)

Country-specific notes

Spain: Only data on teachers who do not have a *Catedráticos* status is shown.
Italy: Data on salaries relates only to teachers with a *Laurea magistrale* (Master's degree)
Austria: **(a)** *Hauptschule and Neue Mittelschule* teachers; **(b)** *Allgemeinbildende Höhere Schule* teachers.

The figure shows that, on average in the EU, the minimum statutory salary rises by 69 % to reach the maximum basic statutory level after 24 years of service. In order to compare how the length-of-service requirement for the maximum salary varies in different countries, a 'coefficient of relative annual salary increase' has been calculated. The EU average for this coefficient is 2.31 %, which means that teachers in the EU secure on average a 2.31 % increase in their basic statutory salary for every year of service completed.

Table 5.8 in Appendix provides the 'coefficient of relative annual salary increase' for the education systems shown in Figure 5.11. Most of the countries having participated in the TALIS 2013 survey with a coefficient lower than the EU average also show a perception of value below the EU average (see Table 5.1 in the Appendix), such as the Czech Republic (0.82 %), Spain (0.94 %), Slovakia (0.98 %), Italy (1.20 %), Croatia (1.46 %), Denmark (1.94 %), France (1.99 %), Portugal (1,99 %), and Estonia (2,04 %). By contrast, some of the education systems with a salary increase coefficient higher than the EU average, have more teachers expressing a favourable perception of the profession's social prestige, such as Romania (2.54 %), Cyprus (4,32 %), the United Kingdom (England, 6,09 %), and the Netherlands (6,78 %). Belgium (Flemish Community), Latvia, and Finland don't follow the same trend and have an annual salary increase coefficient below the EU average but teachers still perceive that their profession is valued in society. On the contrary, Poland has an above EU average salary increase coefficient but less teachers perceive the profession is valued in society.

Closer examination of the relation between salaries and levels of job satisfaction among teachers reveals that the higher the starting salary in a country, the more young teachers below the age of 30 (r=0.48), or with less than five years of experience (r=0.50), say they are satisfied with the teaching profession (see Tables 5.9 and 5.10 in the Appendix). However, the correlation between maximum salary levels and the job satisfaction of older or more experienced teachers is negligible (r=-0.13 or 0.22 respectively). Where maximum salaries are of possible significance is in minimising any variations in levels of satisfaction. So while maximum salary levels may not significantly increase the job satisfaction of more experienced teachers, they do seem to act as a buffer in maintaining stable levels of satisfaction among teachers regardless of their age and experience.

GLOSSARY

Country codes

EU	European Union	**NL**	The Netherlands
BE	Belgium	**AT**	Austria
BE fr	Belgium – French Community	**PL**	Poland
BE de	Belgium – German-speaking Community	**PT**	Portugal
BE nl	Belgium – Flemish Community	**RO**	Romania
BG	Bulgaria	**SI**	Slovenia
CZ	Czech Republic	**SK**	Slovakia
DK	Denmark	**FI**	Finland
DE	Germany	**SE**	Sweden
EE	Estonia	**UK**	The United Kingdom
IE	Ireland	**UK-ENG**	England
EL	Greece	**UK-WLS**	Wales
ES	Spain	**UK-NIR**	Northern Ireland
FR	France	**UK-SCT**	Scotland
HR	Croatia		
IT	Italy	**IS**	Iceland
CY	Cyprus	**LI**	Liechtenstein
LV	Latvia	**ME**	Montenegro
LT	Lithuania	**MK***	former Yugoslav Republic of Macedonia
LU	Luxembourg	**NO**	Norway
HU	Hungary	**RS**	Serbia
MT	Malta	**TR**	Turkey

* ISO code 3166. Provisional code which does not prejudge in any way the definitive nomenclature for this country, which will be agreed following the conclusion of negotiations currently taking place on this subject at the United Nations (http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm [accessed 25.9.2014]).

Statistical codes

: Data not available **(–)** Not applicable **S.E.** Standard error

Abbreviations and acronyms

CPD	Continuing Professional Development	**ISCED**	International Standard Classification of Education
ECET	European Credit Transfer and Accumulation System	**ITE**	Initial Teacher Education
ELET	Early Leaving from Education and Training	**OECD**	Organisation for Economic Co-operation and Development
GDP	Gross Domestic Product	**TALIS**	Teaching and Learning International Survey (OECD)
ICT	Information and Communication Technologies	**UOE**	Unesco/OECD/Eurostat

Classifications

International Standard Classifications of Education (ISCED 1997 and 2011)

The International Standard Classification of Education (ISCED) is an instrument suitable for compiling statistics on education internationally. It covers two cross-classification variables: levels and fields of education with the complementary dimensions of general/vocational/pre-vocational orientation and education-labour market destination. The last version, ISCED 2011 distinguishes eighth levels of education. Empirically, ISCED assumes that several criteria exist which can help allocate education programmes to levels of education. Depending on the level and type of education concerned, there is a need to establish a hierarchical ranking system between main and subsidiary criteria (typical entrance qualification, minimum entrance requirement, minimum age, staff qualification, etc.).

In the report, the ISCED 2011 classification is used, unless specified otherwise. The Eurydice and Eurostat data have been collected according to ISCED 2011, the TALIS 2013 data according to ISCED 1997.

2011 ISCED classification	1997 ISCED classification
ISCED 0: Early childhood education Programmes at this level are typically designed with a holistic approach to support children's early cognitive, physical, social and emotional development and introduce young children to organised instruction outside of the family context. ISCED level 0 refers to early childhood programmes that have an intentional education component.	ISCED 0: Pre-primary education Pre-primary education is defined as the initial stage of organised instruction. It is school-based or centre-based and is designed for children aged at least 3 years.
ISCED 1: Primary education Programmes at this level are typically designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy) and establish a solid foundation for learning and understanding core areas of knowledge, personal and social development, in preparation for lower secondary education. Age is typically the only entry requirement at this level. The customary or legal age of entry is usually between 5 and 7 years of age. This level, which is compulsory in all countries, typically lasts six years, although its duration can range between four and seven years.	
ISCED 2: Lower secondary education Programmes at this level are typically designed to build on the learning outcomes from ISCED level 1. Students enter ISCED level 2 typically between ages 10 and 13 (age 12 being the most common).	
ISCED 3: Upper secondary education Programmes at this level are typically designed to complete secondary education in preparation for tertiary education or provide skills relevant to employment, or both. Pupils enter this level typically between ages 14 and 16.	
ISCED 4: Post-secondary non-tertiary education Post-secondary non-tertiary education provides learning experiences building on secondary education, preparing for labour market entry as well as tertiary education. Programmes at ISCED level 4, or post-secondary non-tertiary education, are typically designed to provide individuals who completed ISCED level 3 with non-tertiary qualifications required for progression to tertiary education or for employment when their ISCED level 3 qualifications do not grant such access. The completion of an ISCED level 3 programme is required to enter ISCED level 4 programmes.	

2011 ISCED classification	1997 ISCED classification
ISCED 5: Short-cycle tertiary education Programmes at this level are often designed to provide participants with professional knowledge, skills and competencies. Typically, they are practically based, occupationally-specific and prepare students to enter the labour market. However, these programmes may also provide a pathway to other tertiary education programmes. Entry into ISCED level 5 programmes requires the successful completion of ISCED level 3 or 4 with access to tertiary education.	
ISCED 6: Bachelors' or equivalent level Programmes at this level, are often designed to provide participants with intermediate academic and/or professional knowledge, skills and competencies, leading to a first degree or equivalent qualification. Entry into these programmes normally requires the successful completion of an ISCED level 3 or 4 programme with access to tertiary education. Entry may depend on subject choice and/or grades achieved at ISCED levels 3 and/or 4. Additionally, it may be required to take and succeed in entry examinations. Entry or transfer into ISCED level 6 is also sometimes possible after the successful completion of ISCED level 5.	ISCED 5: Tertiary education (first stage) Entry to these programmes normally requires the successful completion of ISCED level 3 or 4. This level includes tertiary programmes with **academic orientation** (type A) which are largely theoretically based and tertiary programmes with **occupation orientation** (type B) which are typically shorter than type A programmes and geared for entry into the labour market.
ISCED 7: Master's or equivalent level Programmes at this level, are often designed to provide participants with advanced academic and/or professional knowledge, skills and competencies, leading to a second degree or equivalent qualification. Typically, programmes at this level are theoretically-based but may include practical components and are informed by state of the art research and/or best professional practice. They are traditionally offered by universities and other tertiary educational institutions. Entry into ISCED level 7 programmes preparing for a second or further degree normally requires the successful completion of an ISCED level 6 or 7 programme. In the case of long programmes that prepare for a first degree equivalent to a Master's degree, entry requires the successful completion of an ISCED level 3 or 4 programme with access to tertiary education. Entry into such programmes may depend on subject choice and/or grades achieved at ISCED levels 3 and/or 4. Additionally, it may be required to take and succeed in entry examinations.	ISCED 6: Tertiary education (second stage) This level is reserved for tertiary studies that lead to an advanced research qualification (Ph.D. or doctorate).

Definitions

Availability hours: The hours a teacher has to be available in school to undertake teaching as well as non-teaching activities such as preparing lessons, counselling students, correcting assignments, meeting with parents and other staff, or activities that take place outside the school such as attending trainings or conferences.

Basic gross annual statutory salary: The amount paid by the employer in the year, including general increases to salary scales, the 13th month and holiday-pay (where applicable), excluding the employers' social security and pension contributions. This salary does not include other salary allowances or financial benefits (related, for example, to further qualifications, merit, overtime, additional responsibilities, geographical location, the obligation to teach classes in challenging circumstances, or accommodation, health or travel costs).

Central regulations/recommendations: Different kinds of official documents containing guidelines, obligations and/or recommendations for local public authorities, education institutions and individuals. Regulations are laws, rules or other order prescribed by public authority to regulate conduct. Recommendations are official documents proposing the use of specific tools, methods and/or strategies for teaching and learning. They do not have mandatory application.

Civil servant: Teacher employed by the public authorities (at central or regional level), in accordance with legislation distinct from that governing contractual relations in the public or private sector. In some countries, teachers are appointed for life as **career civil servants** by the appropriate central or regional authorities where these are the top-level authority for education.

Concurrent model: The theoretical and practical professional training is given at the same time as general education. The upper secondary school leaving certificate is the qualification required to undertake training in accordance with this model as well as, in some cases, a certificate of aptitude for tertiary education. Other selection procedures for admission may also be applied.

Consecutive model: The theoretical and practical professional training follows general education. In this model, students who have undertaken higher education in a particular field, move on to professional training in a separate phase.

Continuing professional development: Formal and non-formal professional development activities which may for example include subject-based and pedagogical training. In certain cases, these activities may lead to supplementary qualifications.

Contractual status: A teacher with a contractual status is employed at local or school level on a contractual basis in accordance with general employment legislation and with or without central agreements on pay and conditions.

Development needs/training plan: A development needs analysis is a review of the learning and development requirements. Usually it sets out the core competencies or skill level needed, evaluates the present level of competences and then identifies the areas to be developed. A training plan defines the strategies, tasks, and methods that will be used to meet the development needs.

Employee with contractual status: Refers to teachers employed generally by local or school authorities on a contractual basis in accordance with general employment legislation and with or without central agreements on pay and conditions.

Evaluation of teachers on an individual basis: The evaluation of teachers on an individual basis involves forming a judgement about their work in order to guide them and help them improve as individuals. The teacher subject to evaluation receives personal verbal or written feedback. This evaluation may occur during the evaluation of schools as entities (in which case it generally results in verbal feedback), or be carried out independently (possibly leading to a formal appraisal of the teacher evaluated in this way).

Forward planning of teacher staff requirement is based on the observation of trends and the identification of the most likely scenarios in future teacher supply and demand. The data examined includes demographic projections such as birth rates and migration, as well as variations in the number of trainee teachers and changes within the teaching profession (the number of staff retiring, transfers to non-teaching posts, etc.). The forward planning of teaching staff requirements may be on

a long-, medium- and/or short-term basis. This planning policy is developed either at national or regional level (or both) depending on the relative centralisation (decentralisation) of the education system concerned.

General education: In the concurrent model, this refers to general education courses and mastery of the subject(s) that trainees will teach when qualified. The purpose of these courses, therefore, is to provide trainees with a thorough knowledge of one or more subjects and broad general education. In the case of the consecutive model, general education refers to the degree obtained in a particular subject.

Government-dependent private institutions: An institution that receives more than 50 per cent of its core funding from government agencies. 'Core funding' refers to the funds that support the basic educational services of the institutions. It does not include funds provided specifically for research projects, payments for services purchased or contracted by private organisations, or fees and subsidies received for ancillary services, such as lodging and meals. The term 'government-dependent' refers only to the degree of a private institution's dependence on funding from government sources; it does not refer to the degree of government direction or regulation.

Independent private institutions: An institution that receives less than 50 per cent of its core funding from government agencies. 'Core funding' refers to the funds that support the basic educational services of the institutions. It does not include funds provided specifically for research projects, payments for services purchased or contracted by private organisations, or fees and subsidies received for ancillary services, such as lodging and meals. The term 'independent' refers only to the degree of a private institution's dependence on funding from government sources; it does not refer to the degree of government direction or regulation.

Induction: A structured support phase provided for newly fully qualified teachers. Induction as a part of professional training during the formal initial teacher education programme is not considered, even if remunerated. During induction, new entrants carry out wholly or partially the tasks incumbent on experienced teachers, and are remunerated for their activity. Normally, induction includes training and evaluation, and a mentor providing personal, social and professional support is appointed to help new teachers within a structured system. The phase lasts at least several months, and can occur during the probationary period.

In-school placement: Placement (remunerated or not) in a real working environment lasting typically no more than a few weeks. It is supervised by a teacher, with periodic assessment by teachers at the training institution. These placements are an integral part of professional training.

Labour market monitoring: Looks at general trends in the workforce, but is not related to official government plans. While it may provide decision-makers with insight into changes in teacher supply and demand, it cannot be regarded as official forward planning.

Maximum salary: The basic gross annual statutory salary received by teachers on retirement or after a certain number of years of service. The maximum salary includes solely increases related to the length of service and/or the age (see also 'Basic gross annual statutory salary').

Mentoring support: Refers to professional guidance provided to teachers by more experienced colleagues. Mentoring can be part of the induction phase for teachers new to the profession. Mentoring may also be available to any teachers in need of support.

Minimum number of years of service: Denotes the minimum number of years that teachers need to work before they are entitled to a full pension, in addition to having reached the minimum retirement age.

Minimum retirement age with full pension entitlement: Offers teachers the possibility of retiring before they reach the official retirement age. Their full pension entitlement is subject to completion of the number of years of service required.

Minimum salary: The basic gross annual statutory salary received by teachers at the start of their career (see also 'Basic gross annual statutory salary').

Number of hours of availability at school: Refers to the time available (as specified in contracts) for performing duties at school or in another place specified by the school head. In some cases, this refers to a specified amount of time further to the specified number of teaching hours and, in others, to a global amount of hours of availability that include the time spent teaching. It can be defined on a weekly or annual basis.

Number of teaching hours: Refers to the time spent by teachers with groups of pupils, as specified in contracts. In some countries, this is the only contractually specified working time. It can be defined on a weekly or annual basis.

Official retirement age: Sets the limit at which teachers stop work. In certain countries and in special circumstances, they may continue to work beyond this age limit.

Overall working hours: The number of teaching hours or the number of hours of availability at school, and an amount of working time spent on preparation and marking activities (as specified in contracts) which may be done outside the school. The number of hours may be either earmarked specifically for different activities or defined globally. It can be defined on a weekly or annual basis.

Paid study leave: a medium/long-term leave from work without interruption of normal remuneration granted to individuals that want to follow formal professional development activities that release a certificate (e.g., PhD, Master, or other). Short absences (for a few days or even a week) for compulsory or optional training are not considered as paid study leave.

Private educational institutions: An institution is classified as private if ultimate control rests with a non-governmental organisation (e.g. a Church, Trade Union, or business enterprise), or if its Governing Board consists mostly of members not selected by a public agency. Private educational institutions can be referred to as 'government-dependent' and 'independent'. These terms refer to the degree of a private institution's dependence on funding from government sources; they do not refer to the degree of government direction or regulation.

Professional training: Provides prospective teachers with both the theoretical and practical skills needed to be a teacher. It does not include the academic knowledge of the subject(s) to be taught. In addition to courses in psychology and teaching methods and methodology, professional training includes in-school placements.

Public educational institutions: An institution is classified as public if ultimate control rests with (1) a public education authority or agency or, (2) a governing body (Council, Committee etc.), most of whose members are appointed by a public authority or elected by public franchise.

Special education: Countries have various programmes and delivery mechanisms to provide educational services to mentally, physically, or emotionally disadvantaged students and other groups with special learning needs. These vary in terms of definitions, programmes offered, degree to which special education is integrated into the regular education system, classification of special education students, and type of support given to these students. In the framework of the TALIS 2013 survey, special needs students are defined as 'those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged. [Often they will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education.]'

Teaching hours: The number of hours spent teaching a group or class of students.

Total working hours: The normal working hours of a full-time teacher including time directly associated with teaching as well as non-teaching activities such as preparing lessons, counselling students, correcting assignments, meeting with parents and other staff, or activities that take place outside the school such as attending trainings or conferences.

Transnational mobility: A physical mobility for professional purposes to a country other than the country of residence (either during the initial teacher education or as a teacher). Private mobility – such as travels abroad during holidays for non-professional purposes – is not taken into account. In addition, the TALIS 2013 survey restricts this definition to stays abroad of a week or more at an educational institution or a school and does not take into consideration journeys abroad to attend a conference or a workshop.

STATISTICAL NOTE

This report contains statistical data from the TALIS 2013 database. All TALIS statistical data presented as graphics or discussed in the text are available in an electronic Appendix, together with the standard errors and the explanatory notes at https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:The_Teaching_Profession_in_Europe:_Practices,_Perceptions,_and_Policies.

The Appendix also provides the reference codes of the questions used for the calculation of each statistics. To consult the wording of a question, please see the TALIS 2013 questionnaires, which are available on line at http://www.oecd.org/edu/school/Questionnaires%20TALIS%202013.pdf.

TALIS 2013 international survey

TALIS 2013 (Teaching and Learning International Survey) surveys teachers of lower secondary education (ISCED 2) and their school heads. The first edition of this survey occurred in 2008. For TALIS 2013, 34 countries took part overall, 22 of which were European. Separate questionnaires for teachers and school heads were developed. Within participating countries, schools, as well as teachers within schools, were randomly selected to take part in TALIS. For each country, a minimum of 200 schools and 20 teachers within each of these schools were sampled. TALIS 2013 focused on the following key aspects of the learning environment, which influence the quality of teaching and learning in schools:

- school leadership;
- teacher training, including professional development;
- appraisal and feedback to teachers;
- teachers' pedagogical beliefs, attitudes and teaching practices;
- teacher's reported feeling of self-efficacy, their job satisfaction and the climate in the schools and classrooms in which they work;
- teachers' mobility.

TALIS 2013 data is based on self-reporting and therefore consists of subjective information rather than observed practice. In addition, links between items stabled by statistical analysis does not imply causality between them. Moreover, being an international survey, cultural and linguistic issues may influence respondents' behaviour. Further information on the interpretation of the TALIS 2013 results is available in OECD report (OECD 2014, p. 29).

The TALIS 2013 database is available at
http://stats.oecd.org/Index.aspx?datasetcode=talis_2013%20.

Methodology

Public and private schools

Data from TALIS 2013 includes both public and private schools (both government-dependent and independent – see the Glossary). The choice of limiting the analysis to public schools for better comparability with Eurydice data was considered. However, missing information on the school type variable is higher than 5 % of teachers for eight out of the 22 participating European countries/regions. The percentage of missing entries is even higher than 15 % for Denmark (17.2 %), Iceland (19.2 %), and Norway (23.1 %).

Both suppressing or keeping teachers' responses that presented missing data on the school type, while actively disregarding data from one or the other school type group, would have weaken the representativeness of the sample Moreover, given the overall weight of government-dependent schools among the private institutions it was decided to keep all entries of the TALIS 2013 database. The share of teachers working in the private sector can be more important in some countries and for specific age groups (see Tables 1.5 and 1.6 in the Appendix). Where this factor impacts on the statistical analysis it has been highlighted.

Weight

Within most countries, the TALIS 2013 sampling design is a two-stage stratified sample, with schools being selected first, and then teachers in the sampled and participating schools. Thus, schools and teachers have more or less variable probabilities of being selected.

To compensate for these variable selection probabilities, the data need to be weighted to obtain unbiased estimates of the population parameters. In the TALIS 2013 database, the sum of the teacher weights therefore constitutes an unbiased estimate of the size of the target population, i.e. the number of teachers in a country in lower secondary education (ISCED 2).

Data of the European Union Member States are merged in order to be able to estimate the indicators for the Union for all member countries without distinction. The weightings do not undergo any transformation so that each country's contribution to the estimation of the statistical indicator at the European level is proportional to the country's size, i.e. the number of ISCED 2 teachers. The indicator values at the European level are therefore broadly influenced by the most heavily populated countries such as Germany, Spain, France, Italy, and the United Kingdom (England).

Standard errors

TALIS 2013 surveys, just like any other large-scale education surveys (OECD/PISA; IEA/PIRLS; IEA/TIMSS, etc.), only look at a representative sample of the target populations. Generally, an infinite number of possible samples exist for any given population. It follows that from one sample to another, estimates made for a population parameter (an average, a percentage, a correlation, etc.) can vary. The standard error associated with any estimation of a population parameter quantifies this sampling uncertainty. Based on this estimated parameter and its respective standard error, it is possible to construct the confidence interval that reflects by how much the value calculated from a sample may vary. Accordingly, let us suppose an estimated average of 50 and that its standard error is 5. The confidence interval, with a type 1 error of 5 %, is equal to [50 - (1.96 *x* 5); 50 + (1.96 *x* 5)], i.e. approximately [40; 60]. So, it may be said that we have only 5 chances out of 100 of being wrong if we say the population's average is in this interval.

All the standard errors recorded in this report were calculated using resampling methods and following the methodology of various technical documents of the TALIS survey.

The standard errors of the statistical tables are listed in the electronic appendix.

Correlation coefficient

The correlation coefficient can be used to study the relationship between two continuous variables. This index, varying from -1 to +1, measures the intensity of the relationship between the two variables. A positive coefficient means that when one phenomenon increases, the other also increases, e.g. a positive correlation exists between a person's size and weight, since tall people are – on average – heavier than small people. A correlation close to 0 expresses the absence of dependence. Lastly, if one phenomenon decreases when another phenomenon increases, the correlation is negative e.g. with ageing, life expectancy decreases.

As the correlation coefficient tends towards 1 as an absolute value, the relationship between the two variables intensifies.

In this report, a few correlation coefficients computed at country level are presented. As the number of observation (i.e. the number of countries) is quite small, an outlying observation can heavily influence the value of the correlation coefficient. For avoiding this issue, only rank (also denoted Spearman) correlation coefficients were computed at country level. As European Union Member States cannot be considered as a random sample of countries, computing statistical inferences does not really make sense. However, in order to avoid over-interpreting the results, only correlation coefficients significant at 0.05 or 0.10 are presented in this report.

Logistic regression

In this report, logistic regressions were calculated to determine the relationship between a variable that needs to be explained and which can only have two values – 0 and 1, and also one or more variables capable of influencing it. Thus, for the chapter devoted to mobility, several variables were cross-tabulated, one by one, with the fact that the teacher has (value 1) or has not (value 0) travelled abroad for professional reasons.

We can assume the following gender and mobility distribution for teachers:

Distribution of sex and mobility for 100 teachers

%	Mobile	Non-Mobile
Male teachers	30	10
Female teachers	30	30

For men, the probability of having travelled abroad for professional reasons is equal to $p_H = \frac{30}{30+10} = 0{,}75$. For women, this probability is equal to $p_F = \frac{30}{30+30} = 0{,}5$.

The logistic regression calculates what is generally termed the *odds ratio* which is equal to:

$$OR = \frac{\left(\frac{p_H}{1-p_H}\right)}{\left(\frac{p_F}{1-p_F}\right)} = \frac{\left(\frac{0{,}75}{1-0{,}75}\right)}{\left(\frac{0{,}50}{1-0{,}50}\right)} = \frac{\left(\frac{0{,}75}{0{,}25}\right)}{\left(\frac{0{,}50}{1-0{,}50}\right)} = \frac{3}{1} = 3$$

Compared to women, men have three times more chance of travelling abroad for professional reasons than not. The interest of the logistic regression is the possibility of calculating this index under the control of other variables. Let us suppose that men are older than women on average and that older

persons are more mobile. The logistic regression makes it possible to calculate the relationship between a person's gender and their mobility, under control of age. In other terms, what would this *OR* index value be if men and women were the same age on average.

In the tables showing the results of the logistic regressions, only the *OR* that are statistically different from 0 with a type 1 error of 0.05 are provided.

Cronbach's α for internal consistency

Quite often in the report several variables have been synthesised either in the form of an average or in the form of a sum. To make sure that certain information is not grouped when it should not be, Cronbach's α is calculated. This index, which varies from 0 to 1, evaluates internal consistency of the measure, i.e. its unidimensionality. The more unidimensional the measure, the more the index tends towards 1.

For each index created in this way, we have verified both at the level of each country and at the Europe level, whether the index's value meets scientific standards, i.e. in the context of non-cognitive data, whether its value is above 0.60.

Every index with values below 0.60 is not considered.

Five indices have been derived for the purposes of this report. The table below shows the items that make up these various indices, as well as Cronbach's α value, calculated at the European level. For the question on job satisfaction, three items have been inverted, i.e. items C, D, and F. In the table below, these items are followed by (I) to show they have been inverted.

Composition of the indices and the Cronbach's α value

Name	Questions	α
Job satisfaction ([1])	Question TT2G46, items A,B,C(I),D(I),E,F(I),G,I,J	0.85
Collaborative approach to teaching	Question TT2G33, items A to H	0.71
Constructivist approach to teaching	Question TT2G32, items A to H	0.69
Global need of CPD	Question TT2G26, items A to H	0.90
Participation to CPD during the last 12 months	Question TT2G21, items A to I	0.61

([1]) Only applies to Chapter 4, 'Transnational Mobility'. For the analysis of teacher satisfaction in Chapter 5, 'Attractiveness of the Teaching Profession', three different items of question TT2G46 have been used. 'Job satisfaction' has been calculated on the basis of item J; 'Satisfaction with the school', on the basis of item E; and 'Perception of value', on the basis of item H.

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The Teaching Profession in Europe: Practices, Perceptions, and Policies

This Eurydice report analyses the relation between the policies that regulate the teaching profession in Europe, and the attitudes, practices, and perceptions of teachers. The analysis covers aspects such as, initial teacher education, continuing professional development, transnational mobility, as well as teacher demographics, working conditions, and the attractiveness of the profession.

The report focuses on almost two million lower secondary education teachers employed in the 28 EU Member States, Iceland, Liechtenstein, Montenegro, the former Yugoslav Republic of Macedonia, Norway, Serbia, and Turkey. It is based on Eurydice and Eurostat/UOE data, as well as on a secondary analysis of TALIS 2013, combining qualitative and quantitative evidence. The reference year is 2013/14.

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