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Study on Policy Measures to Improve the Attractiveness of the Teaching Profession in Europe

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Study on Policy Measures to Improve the Attractiveness of the Teaching Profession in Europe

Contract n° EAC-2010-1391

Final Report *Volume 1*

Written by



In consortium with:



European Institute of Education and Social Policy



Education and
Training

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Volume 1

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Executive Summary

Purpose of this study

The purpose of the study is to support the work of the European Commission and the Member States in the framework of the 'Education and Training 2020' programme specifically concerning the teaching professions. It seeks to identify the factors influencing the attractiveness of the teaching professions in Europe and the extent to which such factors have been or could be influenced by policy initiatives.

In summary the main objectives of the study are to:

- Identify and define the main factors that influence the attractiveness of the teaching profession, the extent to which these factors are amenable to change through policies, and the extent to which they are culture-bound and country-specific.
- Analyse the current state of the teaching profession in the European countries: investigate if there is a shortage of qualified teachers and, if so, whether it concerns all levels of education and all regions or is specific to certain levels, certain subjects or certain geographical areas. Such an investigation is necessary to understand the greater or lesser need in each country for policies that are specifically designed to enhance the attractiveness of the teaching profession. It is also necessary to evaluate the impact of previous education policy measures, which either aim specifically at the attractiveness of the teaching profession or more generally at the improvement of the quality of education.
- Identify and map the policy measures which affect the attractiveness of the teaching profession in 34 European countries or education systems, and then propose a typology for policies which have been formulated and implemented. In particular the study seeks to identify policy measures to attract high-quality recruits, to make careers more attractive, and to enhance the social status and prestige of teachers taking into account the cultural and historical contexts specific to each country.
- Analyse policies which have already been implemented with a view to evaluating their effectiveness and impact on the profile, quality and quantity of candidates. This has been carried out based on objective (evolution of the number of good candidates and retention of qualified teachers) and subjective (i.e. the responses to the questionnaires and interviews designed for this study) criteria. One of the main difficulties is to take into account the impact of more general factors that can play an important role, such as the economic context and the necessity to reduce public budget deficits.
- Propose recommendations that include the necessary conditions for their implementation and the level at which they could most effectively be implemented (local, regional, national, European).

The study focused on all education levels, from the elementary (ISCED 1) to the upper-secondary level (ISCED 3).

Context

The study comprised three stages: a literature and document reviews, an online questionnaire administered in 31 countries and field interviews with national decision-makers in the education sector, which were conducted by European experts in 20 countries. The online questionnaire was devised for six categories of respondents: teachers in schools, students in tertiary education (humanities, languages, mathematics and science), students in initial teacher education, teacher educators, school leaders (school heads and principals) and representatives of local authorities (though only a small number of the last category). We received 80,682 usable responses to the online questionnaire, which can therefore be said to contain a representative sample of the opinions of the main actors in the education system about the teaching profession in Europe today. Cross examination of the data makes it possible to draw various conclusions about the elements that affect the teaching profession's attractiveness and to make recommendations for education decision-makers to ensure they recruit—and also retain—the best candidates, with the aim of ensuring a high quality level of teaching and learning in European education systems.

The shortage of qualified teachers in Europe

- Certain European countries are already, or will soon be, facing a shortage of qualified teachers. In some countries, this shortage affects all education levels; in others, it is still confined to a few disciplines or geographical areas.
- In most European countries, the teaching profession has lost much of its capacity to attract the best candidates. Among the main reasons: decline of the prestige of the teaching profession, deterioration of working conditions and relatively low salaries compared with other intellectual professions. But in some countries (Ireland, Finland, Scotland) the teaching profession is still very much appreciated by the best students.
- The ageing of the teaching population in several countries further adds to the structural risk of an imminent shortage of qualified teachers. This is particularly the case in a few countries (e.g. Germany, Italy and Sweden), due to the retirement of many qualified and experienced teachers.
- Most tenured teachers have no intention of changing their profession.
- In many countries, the growing shortage is addressed by means of longer working hours for teachers, higher pupil-teacher ratios and an increase in the retirement age.
- Keen competition among schools, regions and even countries aggravates supply and demand imbalances with respect to qualified teachers.
- Most governments do not publish detailed data about the shortage of qualified teachers in their countries or information on their strategies for tackling it.

Motivations for becoming a teacher

- Students, teachers and school heads (usually former teachers) all say they chose their profession out of a desire to transmit values, to work with children and young people and to feel they are doing work that is socially relevant. These reasons are the same for teachers of all ages and both genders. So, it appears that teaching is mainly a vocation chosen for altruistic rather financial reasons. But at the same time, in most countries students in tertiary education believe that teachers' salaries should be increased, and the teachers who envisage looking for another job say that it would be mainly for financial reasons.
- A large majority of teachers in all countries surveyed confirm they would choose the teaching profession again.

Recruitment of qualified teachers

- Teacher education at the master's degree level appears to be best suited to the current expected level of excellence. This is mainly due to the new roles and responsibilities of teachers in a fast-changing context. It also contributes to improve the prestige of the profession in society (e.g. in Finland). A master's degree is becoming mandatory in a great number of European countries.
- Most countries (18) currently require a three- to four-year bachelor's degree (e.g. Belgium, Romania, Belgium, Norway and the United Kingdom). The remaining countries require a four- to five-year master's curriculum (i.e. Finland, France, Iceland, Portugal and Spain).
- In highly centralised systems, recruitment is based on competitive exams following tertiary education.
- Countries with a less centralised education system, on the other hand, allow schools to manage recruitment, in which case candidates are selected based on an interview as well as on their academic and professional qualifications.

Career changes

- Teachers who wish to enter a different career within the education field (teacher educator, inspector, school head) have access to fairly transparent retraining schemes.
- Teachers wishing to embark on an altogether different career receive little or no assistance regarding professional retraining.

Improvement of initial teacher education

- Synergy between academic education and teaching practice in schools is deemed crucial to preparation for the profession.
- A majority of future teachers feel they are insufficiently prepared for their professional activity, especially as regards to the practical issues of class management and pupil assessment.

- Most education students consider that a concurrent model of initial teacher education with high exposure to practice in school is the best way to prepare them for their future teaching activity.
- Research suggests that to be effective, initial teacher education needs to be based on 'concurrent model' acquiring both academic and professional knowledge and hands-on field experience.

Early career support (ECS)

- All countries are concerned about ECS for newly-qualified teachers, yet only a few have devised comprehensive induction programmes so far.
- ECS is indispensable for reducing the number of teachers who leave the profession. Some well-designed and comprehensive early career support programmes are perceived as an enhancement of the teaching profession's attractiveness and the best way of retaining teachers.
- ECS allows for newly-qualified teachers to be supported during their first years in the complex reality of their profession.

Continuing professional development (CPD) for teachers

- CPD is indispensable to ensure that teachers adapt to new developments.
- Currently, only a minority of teachers actually receive genuine CPD.
- According to the data gathered, women are keener to commit themselves to professional development than men, and young and older teachers are less likely to do so than teachers in their prime.
- Teachers expect CPD to help them with teaching pupils with special needs, ICT skills, pupil discipline and behaviour control.
- Very often CPD presents the following shortcomings: fragmentation, waste, lack of coherence, remoteness and as being insufficiently practical.
- Teachers who attend CPD programmes should receive recognition through career advancement or others means.

Salaries and working conditions of teachers

- Salaries are an important aspect for increasing the teaching profession's attractiveness.
- This has led certain countries to raise salaries or increase the salary progression' of only early career teachers.

Help for teachers in difficulty

- In most European countries, students, teachers and school heads feel that their working conditions have deteriorated. The difficulty of adapting to frequent changes in the education system poses a problem for teachers, as does a loss of autonomy and of the liberty to take initiative.
- There are other difficulties, too: excessive ratios of pupils to teachers, a rising number of tasks not directly related to teaching, little or no institutional

recognition for the effort put into their teaching, the growing heterogeneity of classes, and the demanding attitudes of parents.

- Specific provisions for assisting teachers faced with such difficulties are insufficient or unknown to teachers.

The profession's image

- The profession's social prestige and its poor image in works of fiction and the media may have an impact on the number of candidates who consider entering the teaching profession. However, students and student teachers responding to our online survey declared that they were not much influenced by the image given by media.
- Well before the recruitment stage, negative images of the profession may deter a proportion of potential teacher students.
- In most European countries—and beyond any national variables—the media (cinema and television) provide an image of a profession that is undergoing an identity crisis, and mostly emphasise the profession's difficulties. All media seem to agree that the teaching profession is in decline (except in countries like Finland and Ireland).

Recommendations

Recruitment of future teachers

- Diversify selection criteria to enable suitable candidates from other fields to enter the teaching profession.
- Preserve high recruitment requirements.

Retraining for teachers

- Devise and publicise assistance schemes for teachers who wish to leave the teaching profession for a different career.

Initial teacher education (ITE)

- Ensure that student teachers come into contact with the field early on in their ITE and are made aware of real-life teaching requirements.
- Provide solid training for school heads, teacher educators, mentors and teachers who coach student teachers.

Early career support (ECS)

- Extend ECS programmes beyond the first year of teaching service to the first two or three years.
- Reduce the number of working hours for new teachers, so as to facilitate their participation in ECS programmes.
- Make comprehensive support programmes compulsory for all beginning teachers.

Continuing professional development (CPD)

- Ensure that CPD is mandatory and free of charge.
- Provide CPD in or close to the schools or education institutions to avoid waste of time, dispersion and inefficiency.
- Organise ITE, ECS and in-service training as an integrated and consistent continuum of professional development during the whole of the teacher's career.

Salaries

- Define transparent criteria of professional excellence.
- Encourage swifter salary increases for the most effective teachers.

Teachers facing difficulties

- Be more attentive to teachers facing difficulties and help them solve their issues. In particular, develop adapted coaching.

Profession's image

- Communicate more about a profession that transmits values to future generations.
- Develop partnerships with the media to foster a more accurate picture of the teaching profession.

Introduction

Objectives and scope of the study

This ***Study on policy measures to improve the attractiveness of the teaching profession in Europe*** has been commissioned by the European Commission (Contract EAC-2010-1391). The overall purpose of the study is to support the work of the European Commission and the Member States in the framework of the 'Education and Training 2020' programme. It seeks to identify the issues relevant to the attractiveness of the teaching profession in Europe and then to map, analyse and evaluate policy measures currently implemented in Europe for attracting high quality candidates into teaching. As required by the contract the study proposes recommendations about measures that could enhance the attractiveness of the teaching profession. This is an important issue not only to succeed in attracting sufficient numbers of recruits, but also to ensure the quality of applicants and that they have the necessary competences. It is equally important for the future to keep good teachers in the profession by offering an interesting career development that meets their expectations.

In summary the main objectives of the study are to:

- Identify and define the main factors that influence the attractiveness of the teaching profession, the extent to which these factors are amenable to change through policies and the extent to which they are culture-bound and country-specific.
- Analyse the current state of the teaching profession in the European countries: investigate if there is a shortage of qualified teachers and, if so, whether it concerns all levels of education and all regions or is specific to certain levels, certain subjects or certain geographical areas. Such an investigation is necessary to understand the greater or lesser need in each country for implementing policies that are specifically designed for enhancing the attractiveness of the teaching profession. It is also necessary in order to evaluate the impact of previous education policy measures, either aiming specifically at the attractiveness of the teaching profession or more generally at the improvement of the quality of education.
- Identify and map the policy measures which affect the attractiveness of the teaching profession in 32 European countries, and then propose a typology of policies that have been formulated and implemented. In particular the study seeks to identify policy measures to attract high-quality recruits, to make careers more attractive, and to enhance the social status and prestige of teachers taking into account the cultural and historical contexts specific to each country.
- Analyse policies implemented with a view to evaluating their effectiveness and impact on the profile, quality and quantity of candidates. This will be carried out based on objective (evolution of the number of good candidates and

retention of qualified teachers) and subjective (i.e. the responses to the questionnaires and interviews designed for this study) criteria. One of the main difficulties is to take into account the impact of more general factors that can play an important role, such as the economic context and the necessity to reduce public budget deficits.

- Propose recommendations that include the necessary conditions for their implementation and the level at which they could most effectively be implemented (local, regional, national, European).

The study concerns teachers in primary and secondary education (ISCED 1, 2 and 3) in 32 countries (the 27 EU Member States, the 3 EEA countries [Iceland, Lichtenstein and Norway], Croatia and Turkey). The definition of a teacher is that given in the Eurydice glossary, though it will be noted that there are variations among the countries. Taking account of these differences has been part of the sampling process for the data collection.

European context of education policy

Improving the quality of education is a key element in the Education and Training 2020 strategy adopted by the Ministers of Education of the EU Member States¹. Within this general framework, the quality of teachers and teaching is all the more critical because education systems are faced with major challenges for teachers and managers that are continually changing and even increasing. In addition, within the next decade many countries will have to replace a high percentage of teachers who are reaching retirement age. The quantitative and qualitative challenges vary among the countries and school subjects. For mathematics, science and technology there is a particularly tough challenge to be met. Furthermore, in addressing these challenges the gender imbalance will also need to be addressed, especially for primary education, where there is a high percentage of female staff.

Improving the quality of teaching has been on the reform agenda in many European countries in the last few decades, whether as part of intense reform programmes of general, technical and vocational education in the central and eastern European countries over the last twenty years or in other regions of Europe as part of the ongoing process of raising quality, making education more relevant to perceived 21st-century needs for personal development, citizenship and future employment. Beyond the borders of the EU and its partner countries, OECD countries have also examined the question of how to attract to the profession, recruit, educate and keep the best teachers (OECD, 2005).

¹ Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), (2009/C 119/02, 28/5/2009)

At the European level, the text adopted in 2007, *Improving the Quality of Teacher Education*², provides a useful reminder of the mission of teaching, stating that “teaching provides a service of considerable social relevance: teachers play a vital role in enabling people to identify and develop their talents and to fulfil their potential for personal growth and well-being, as well as helping them to acquire the complex range of knowledge, skills and key competences that they will need as citizens throughout their personal, social and professional lives”. In support of this, in 2005, *Common European Principles for Teacher Competences and Qualifications*³, were agreed by the Member State experts, to support policy-makers at national or regional level but also to provide a potentially interesting research and evaluation agenda. They are:

² *Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, on improving the quality of teacher education*(Official Journal C 300, 12.12.2007)

³ *Common European Principles for Teacher Competences and Qualification* , European Commission, DG EAC, 2005

Work with others:	They work in a profession which should be based on the values of social inclusion and nurturing the potential of every learner. They need to have knowledge of human growth and development and demonstrate self-confidence when engaging with others. They need to be able to work with learners as individuals and support them to develop into fully participating and active members of society. They should also be able to work in ways which increase the collective intelligence of learners and cooperate and collaborate with colleagues to enhance their own learning and teaching.
Work with knowledge, technology and information:	They need to be able to work with a variety of types of knowledge. Their education and professional development should equip them to access, analyse, validate, reflect on and transmit knowledge, making effective use of technology where this is appropriate. Their pedagogic skills should allow them to build and manage learning environments and retain the intellectual freedom to make choices over the delivery of education. Their confidence in the use of ICT should allow them to integrate it effectively into learning and teaching. They should be able to guide and support learners in the networks in which information can be found and built. They should have a good understanding of subject knowledge and view learning as a lifelong journey. Their practical and theoretical skills should always allow them to learn from their own experiences and match a wide range of teaching and learning strategies to the needs of learners.
Work with and in society:	They contribute to preparing learners to be globally responsible in their role as EU citizens. Teachers should be able to promote mobility and cooperation in Europe and encourage intercultural respect and understanding. They should have an understanding of the balance between respecting and being aware of the diversity of learners' cultures and identifying common values. They also need to understand the factors that create social cohesion and exclusion in society and be aware of the ethical dimensions of the knowledge society. They should be able to work effectively with the local community and with partners and stakeholders in education—parents, teachers, education institutions, and representative groups. Their experience and expertise should also enable them to contribute to systems of quality assurance.

However, research, reports and communications suggest strongly that there remains much to be done in this area. As the 2008 communication, *Improving Competences for the 21st Century*⁴, observed “*Staff need the skills to give every pupil adequate opportunities to acquire necessary competences in a safe and attractive school environment based on mutual respect and cooperation, which promotes social physical and mental well-being and where bullying and violence have no place. Yet most*

⁴ *Improving Competences for the 21st Century: An Agenda for European Cooperation on Schools*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions, Brussels, COM(2008) 425 final

countries report shortfalls in teaching skills." These preoccupations remain a central focus of the EU strategy on education and training as illustrated in *Council Conclusions of 26 November 2009 on the professional development of teachers and school leaders*⁵, that underlined the importance of the knowledge, skills and commitment of teachers as a critical component in achieving high quality educational outcomes and underlining the lasting effects of good teaching on young people's lives. The Conclusions recognised that, despite differing characteristics, European education systems share a common need to attract and retain teaching staff and school leaders of the highest calibre in order to ensure high quality educational outcomes and therefore that teacher education programmes should be of high quality, evidence-based and relevant to needs.

As part of the response to this ongoing need for high-quality initial and continuing professional development of teachers, a handbook was published by the Commission in 2010 based on work undertaken by the peer cluster on Teachers and Trainers: *Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policymakers*⁶. It responded to a request for practical policy information on induction programmes made at the informal meeting of Education Ministers (Gothenburg, September 2009) on the professional development of teachers and school leaders, where it was agreed that: *"In view of the increasing demands placed upon them and the growing complexity of their roles, teachers need access to effective personal and professional support throughout their careers, and particularly during the time they first enter the profession. [...] Efforts should be made to ensure that all newly qualified teachers receive sufficient and effective support and guidance during the first few years of their careers."*⁷ Since the early 2000s, working groups have played an important role in rolling out the Open Method of Coordination, involving Member States' staff and experts in a process of mutual peer learning and dissemination of interesting and promising policies.

In analysing the impact of recent reforms in school education towards the broader inclusion of key competences in the school curriculum, a report drafted in 2009 for the Directorate General for Education and Culture of the EU Commission (GORDON et al, 2009), observed that the countries that seemed to be particularly successful in implementing policies of cross-curricular key competences used several instruments such as setting appropriate curriculum goals and standards; shaping school practices through support for innovation, school development and leadership; giving appropriate feedback through assessment and evaluation and, importantly, also by developing teacher competences as part of well-elaborated strategies. One question posed in this study was whether teacher education in European countries built up and enhanced the key competences of teachers, as well as their capacities to facilitate their acquisition by students. It identified varying outcomes and practices. However it also noted that,

⁵ Council conclusions of 26 November 2009 on the professional development of teachers and school leaders (2009/C 302/04)

⁶ European Commission Staff Working Document SEC (2010) 538 final

⁷ Ibid

“in their policies and programmes, countries widely recognize the changing role of teachers towards becoming collaborators, facilitators of learning, and lifelong learners, but there is still too little debate involving teachers themselves.”

Structure of the report

The report is composed of two volumes.

The first volume, primarily intended for policy-makers, presents the main findings of the study and recommendations drawn from these findings. Following the executive summary and the introduction, chapter 1 presents an overview of the policy measures implemented to attract qualified teachers in the European countries. In chapter 2 the main results of the online survey are described and analysed providing an important and new source of information. Chapter 3 presents, firstly, the main findings of the study (from the desk-based research and analysis based on existing sources as well as the field work undertaken through the online survey, interviews and workshops) and, secondly, the policy recommendations.

The second volume provides a much more detailed description of the methodology of the study and its results. Chapter 1 describes the main methodological issues, such as the difficulty to give an operational definition of attractiveness, the accessibility to information and data, the design and dissemination of the online survey, the implementation of interviews and workshops. Chapter 2 focuses on the issue of teacher shortages in European countries. Based on the rare data available in the different countries as well as the interviews with high-level decision-makers in sixteen of them, an assessment has been made of the importance of the shortage of qualified teachers in each country. Then, Chapter 3 explores available data and opinions about teachers' salaries and working conditions that are deemed as important factors of attractiveness in the literature and by the respondents to the online questionnaire. Chapter 4 deals with the analysis of the data concerning initial teacher education and recruitment. It is followed in Chapter 5 by an analysis of data gathered on support and guidance to newly qualified teachers as well as continuing professional development and mobility. Chapter 6 addresses the issues of the prestige of the profession and the social status of teachers. Chapter 7 presents monographs of each country or education system under scrutiny. This second volume also includes the full list of references used for this study and appendices that present methodological issues related to the field work and some deeper analysis of the online questionnaire results.

Chapter 1 - Overall picture of policy measures for improving the attractiveness of the teaching profession in Europe (Mapping)

1. Methodology for preparing a mapping of policy measures among European countries

Opening remarks

The data collected allow us to make a first distinction between countries with a global shortage of qualified teachers and those with no global shortage. They also allow us to make another distinction between three types of countries with respect to the types of policy measures : those where global and systemic sets of policy measures have been taken and implemented in order to enhance the attractiveness of the teaching profession (considered as a central objective), those where some significant piecemeal measures likely to have an impact on the teaching profession attractiveness have been undertaken within more global strategies aiming at reforming their education system and a third category of countries where very few measures of this type have been taken, either because it was not perceived as a political priority or because of financial restraints, mainly in the recent period.

Such distinctions inevitably entail some arbitrary choice as the frontier between overall and partial shortage of 'qualified' teachers is not clear and in the same way the frontier between significant and not significant policy measures is not always obvious. Moreover, in most countries, there is hardly any evaluation at all of the impact of such measures because of a lack of the required tools and methodology to carry them out.

1.1. Available sources of information

The mapping of the measures taken in the different European countries in order to improve the attractiveness of the teaching profession rely on official documents and reports but also to a large extent on information gathered in some of the countries by the 'experts 2' during the interviews with decision-makers or other persons with responsibilities either at local level or within national teacher unions. For such data, it is impossible to indicate the precise source for reasons of confidentiality. In order to make valid comparisons, the interviews had to follow a common grid including the following seven questions:

- Is there a shortage of qualified teachers in your country?
- What is the general image of the teaching profession in your country?
- Over the last 5 years or so, what main evolutions and what policy measures have had an impact on the attractiveness of the teaching profession?
- What priority measures should be taken in order to make the teaching profession more attractive?
- Is there a tendency of more teachers resigning for other jobs?
- Is there a tendency of more candidates coming from other jobs?

- Over the last 5 years or so, were there any information or recruitment campaigns concerning the teaching profession? If so, what was their impact?

In a second stage, the experts 2 again interviewed (sometimes by telephone or e-mail) the same persons by asking some more precise questions about the factors and policy measures likely to enhance the attractiveness of the teaching profession. In many cases, our interlocutors have been able to provide more details about their sources and the relevant legal or regulatory documents (laws, decrees, etc.) likely to have some impact on the following aspects:

- Improve recruitment
- Improve initial teacher education
- Improve induction programmes
- Improve the quality of the support available to teachers facing difficulties
- Improve the continuing teacher education programmes
- Improve geographical mobility of teachers
- Facilitate inter-professional retraining of teachers (also for non-education careers)
- Improve the conditions for career advancement
- Make salaries more attractive
- Change the profession's image
- Improve the working conditions

In this chapter, we limit our analysis to the measures taken over the last decade, without describing earlier initiatives some of which have been analysed in international studies or national reports, such as: in Scotland (DONALDSON, 2011) or in Turkey (ZULKUF ALTAN, 1998).

In many cases, it is difficult to know if some measures are still drafts not implemented yet (Belgium, Greece, Italy or The Netherlands for instance) or that have just started to be implemented and have met with some unexpected difficulties. The declarations of senior officials are sometimes ambiguous in this respect with a tendency to be very discrete about the actual obstacles to an effective implementation. Such projects are mentioned if some information about the date of official implementation is provided. Sometimes, some measures have been cancelled or postponed because of the recent financial crisis: for example in Spain the measures to take into account participation in CPD for career advancement, or in Italy the cancellation of many national competitive examinations (in theory biennial) for recruiting teachers: the organisation of such an examination in the last term of 2012 was significant as there had not been any since 1999.

A cumbersome access to reliable information: the experts 2 were often faced with some retention of information with respect to the actual implementation of some measures and their real impact. Many interviewees did not really make a distinction between general measures aimed at improving the education system and those aiming more specifically at improving the attractiveness of the teaching profession. There was

also often a lack of awareness about the possible impact of some policy measures on the attractiveness of the teaching profession. Finally, there was some reluctance to recognise the possible absence of relevant measures to meet such an objective (except from the representatives of teacher unions).

1.2. An almost general absence of impact studies

One of the main findings of our study is the almost total absence of impact studies carried out either by the authorities themselves or by independent bodies (agencies, universities, etc.). After identifying the measures in place, we were faced with the difficulty of gauging their impact given the absence of impact studies, which can only be conducted by supervisory bodies or researchers with access to reliable data. Here is an example: the extension of the initial teacher education period for all ISCED levels is considered by education system officials and a large part of the educational community to contribute to the teaching profession's attractiveness. Yet, mainly in countries where students have to pay course fees, this longer period of study may also deter potential candidates, mostly from modest backgrounds, because of the additional cost. The decision to raise the recruitment standard is hardly ever examined by means of an impact study. This is in part due to the authorities' lack of incentive to commission such studies, but also to the fact that certain measures were introduced only recently, so that their impact cannot yet be assessed.

On the other hand, all existing analyses regarding the impact of such measures, especially numerical data, have been included in the expert 1 team's presentation of current education policies. Due care was taken to discard any comments based on personal opinions. Indicators that needed to be considered here were the evolution of the number of newly qualified teachers, the decision to take up studies leading to a teaching career, and the like. For instance in Norway, following a broad programme of reform, *"New teacher education programs for primary and lower secondary school" from 2010, have had an impact on the number of teacher students. The new TE programs have had an impact on teacher student recruitment shown by statistics from Norwegian Universities and Colleges Admission Service (NUCAS): a 54% increase in qualified applicants with TE as 1st priority in the period 2008-2012, against a 35% increase in applications for higher education in general"* (GNIST, 2009: Norway Government White Paper n° 11).

In France, a report drafted by the Court of Auditors – Cour des Comptes - (February 2012, p. 788) says the following about the requirement of a Master's degree: *"Raising the level of the degree required to be admitted to recruitment competitions has led to an automatic drop in the number of likely candidates. There are indeed 300,000 fewer Master's graduates than there are Bachelors... The ministry admits that, as a result, certain selection criteria had to be substantially softened... This reform (school term 2010/2011) has led to savings whose amount remains difficult to quantify."*

1.3. Is the shortage of qualified teachers the main incentive to take action?

In volume 2, chapter 2, we will justify the distinction made between countries not faced with an overall shortage of qualified teachers and those already faced with such a shortage. This distinction is helpful for the analysis of the measures in place to enhance the profession's attractiveness, because countries faced with a shortage or a significant attrition of teachers (Belgium, Romania, Slovakia) are essentially those that might have taken action had they had the required budget. This is also the case of countries characterised by an aging teacher population (Germany, Italy, The Netherlands and Sweden) and the ensuing high number of retirements (see volume 2, chapter 2). However, it is not always the case. Some countries without any global shortage of qualified teachers have undertaken important steps for enhancing the attractiveness of the teaching profession (Ireland for instance) while some countries facing a global shortage of teachers did not take any significant measure to change the situation.

2. Distinction of countries according to the aims and the importance of the measures in place

One can distinguish between three groups of countries:

1. A group of countries characterised by the adoption of a global and systemic strategy aimed at enhancing the attractiveness of the teaching profession.
2. A group of countries characterised by a significant number of policy measures likely to have an impact on the attractiveness of the teaching profession even though it is not their main objective which might for instance be the more general goal to improve the education system.
3. A group of countries characterised either by very few measures likely to have an impact on the attractiveness of the teaching profession or even by the absence of such measures.

2.1. Countries that have implemented global and systemic strategies for enhancing the attractiveness of the teaching profession

Five countries have undertaken over the last decade a set of initiatives which constitute a coherent and systemic strategy aiming at improving the image and the attractiveness of the teaching profession. It can seem a paradox that only one of them – Norway – is actually facing a shortage of qualified teachers. In the four other countries – Estonia, Lithuania, Ireland and Scotland – the teaching profession is already attractive for quite different reasons with perhaps one common feature: a traditional good image of education and of teachers within society. However, the situation is quite different at least with respect to salaries: teachers are very well paid in Ireland and fairly well paid in Scotland, while it is not at all the case in Estonia and Lithuania where teachers' salaries are among the lowest in Europe. So, it seems that the setting of priorities on the countries' political agenda is not necessarily determined by the objective situation of each country. The decision whether to consider an improvement of the attractiveness of the teaching profession as a central objective

depends more on the importance attached to the quality of teachers as a strategic factor in improving the effectiveness and equity of education systems. Another common feature of the policies implemented in these five countries is that they integrate in a systemic strategy several factors that we have analysed in this report as contributing to the attractiveness of the teaching profession, like level of recruitment, initial education of teachers, early career support and continuous professional development conceived as a continuum, and a strategic internal and external communication promoting a new professionalism of teachers playing a crucial role in a fast-changing society.

2.2. Countries where a significant set of piecemeal measures is likely to have a positive impact on the attractiveness of the teaching profession as a result of a more global policy aiming at improving their education system

Eleven countries have in common that they have implemented a series of measures likely to impact on the attractiveness of the teaching profession to some extent as side-effects of more global policies aiming at improving their education systems. Among them four countries – Austria, Denmark, Germany and Luxembourg - are facing a teacher shortage mainly for demographic reasons because of the average age of their teachers, even though the present trend of higher retirement age for financial reasons should reduce the impact of the age pyramid of the teaching population. The seven other countries – Belgium (nl), the Czech Republic, England, France, Hungary, Poland and Portugal - are not faced with an overall shortage of qualified teachers except for scientific or technological subjects, and in the case of Portugal there is even a significant surplus of teachers who are unemployed. Here again the situation in these countries is very heterogeneous in many respects. The salaries are very high in Portugal (especially with respect to other comparable professions) while they are very low in the Czech Republic. The professional status is also very different: teachers are civil servants in France and Portugal (where job security is a strong factor of attractiveness), they have a different status in England and Hungary. Among the convergent trends there is the level of recruitment at the level of the Master's, the development of early career support and of CPD and the development of teachers' responsibilities which are related to increasing school autonomy.

2.3. Countries without a significant set of measures likely to enhance the teaching profession's attractiveness

Irrespective of whether or not these seventeen countries are faced with a shortage of teachers, they have taken no meaningful action to enhance the teaching profession's attractiveness, either for lack of budget (ex: Bulgaria, Iceland, Italy, Romania, Slovakia and Turkey) or because the profession is considered already attractive enough (ex: Croatia, Cyprus, Finland and Greece) or for other reasons that are not clear (The Netherlands and Sweden). In this group of countries, those steps that have been taken were usually aimed at improving the education system's functioning by targeting various aspects of the teaching profession (recruitment, initial education or continuous professional development, support for early-career teachers, assessment, etc.). Finland, with its "virtuous circle" of excellent pupil attainment in international tests leading to enhance the image of teachers and hence to attract evermore

qualified candidates, is quite an exception—all measures likely to enhance the teaching profession’s attractiveness were taken long ago.

Table 1.1: Mapping of countries and education systems according to policy measures aiming at enhancing the attractiveness of the teaching profession

	Global and systemic strategy	Significant piecemeal policy measures	No significant targeted policy measures
Global shortage of qualified teachers	Norway	Austria, Denmark, Germany, Luxembourg	Belgium (fr), Italy, The Netherlands, Romania, Slovenia, Slovakia, Sweden, Turkey
No global shortage of qualified teachers	Estonia, Ireland, Lithuania, Scotland	Belgium(nl), Czech Republic, England, France, Hungary, Poland, Portugal	Bulgaria, Croatia, Cyprus, Finland, Greece, Iceland, Latvia, Malta, Spain

In volume 2, chapter 7, **33 short monographs** summing up some characteristics and the main measures adopted in each country or education system are presented in an alphabetic order.

3. Policy measures that are more or less targeted at the attractiveness of the teaching profession

Opening remarks

Most countries have had to take some measures having a potential negative impact on the attractiveness of the teaching profession because of the economic crisis and budgetary constraints: for instance Greece, Ireland, Romania and Spain through a reduction of teachers’ salaries, Hungary by increasing the weekly number of hours for attendance in school, or Germany with the suppression of a civil service status in some Länder. In nearly all countries retirement age has been raised (England, Germany, Greece, Italy, Lithuania, Norway, Portugal, Spain) or is about to be raised (France, Hungary, Slovakia) and in some countries the age limit has been increased to the age of 70 (Norway, Spain) or even suppressed (England).

The participation of teacher unions to the decision-making process was not effective in many countries, but it has been effective and efficient in Nordic countries (Estonia, Finland, Lithuania, Norway or Sweden for instance) and in Ireland, Scotland and France. It was less the case in Belgium, Greece and Romania.

3.1. The most favoured policy measures

Measures in order to recruit more qualified teachers

"In the nineties, the selection and recruitment of teachers were not the subject of major reforms" (EURYDICE, 2005), while during the last decade reforms have been raising the level of recruitment with a growing number of countries requiring the Master's level at least for ISCED-3 teachers, even though in a few countries this requirement has been postponed for economic reasons (Hungary for example). But in countries where the reform has been implemented, very few impact studies have been designed for evaluating their short-term and long-term consequences.

Measures to improve initial teacher education

During the interviews this issue has been often described as a key element to improve the image of the profession. Everywhere, the measures actually implemented aimed at giving more importance to practical education and better preparing the students to some actual aspects of the profession. Other common objectives have been to better articulate theoretical courses and practical classroom experience and to define standards in order to reduce the heterogeneity of the initial education of teachers within the country but also among European countries. In some countries the actual implementation of the new curricula is not achieved yet (for instance in Bulgaria or in Turkey) or still in progress (Hungary, France). In other countries, no significant reform of the initial education of teachers has actually been undertaken beyond authorities' declarations of intent: Belgium (Fr), Italy, Poland, Romania and Slovakia for instance.

Measures to improve early career support

In a 2012 Eurydice report, it is stated that *"In addition to educational and professional qualifications teachers must also undergo an induction period in 13 countries or regions, usually directly after their qualification: Austria, England, Cyprus, Estonia, Germany, Ireland, The Netherlands, Norway, Poland, Romania, Scotland, Slovenia and Turkey."* This evolution has been strongly encouraged by the European Commission: a handbook for policymakers was published in 2010 (European Staff Working Document, SEC 538 final) *"for developing coherent and system-wide induction programmes for beginning teachers"*. This booklet also describes examples of some country policies in Cyprus, Estonia, Ireland, The Netherlands, Norway and Scotland. In England, the former TDA (now the Teaching Agency) has published in 2009 an *"essential guide for NQT induction tutors"* and some studies have analysed the literature and impact studies existing on this issue (ASHBY et al, 2008; HOBSON et al, 2009). However, there are still more European countries that have not yet developed systematic induction: Belgium, Bulgaria, Czech Republic, Denmark, Finland, France (expected in 2013), Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg (for ISCED 1), Malta, Portugal, Slovakia, Spain, and Sweden.

Such an evolution meets the expectations of prospective teachers. In responding to our online questionnaire 85% of the student teachers (overall figure for all countries) ranked that the best way of entering the career was an induction period with a mentor. However the available data about the various existing induction devices do not allow to assess their quality and their effectiveness. One important issue that will be discussed in a European conference in Dublin in February 2013 is the question of

the identity and professional development of the various *teacher educators* and their complementary roles. Another issue is about the various modalities of organising early career support.

3.2. Some less frequent policy measures

The analysis of available information and data shows that some important aspects of the teaching profession (according to the opinions and expectations of the various categories of stakeholders expressed through the responses to our online questionnaire, the interviews and the creative workshops) were not regarded as strong priorities on the policy agendas in most European countries. It is especially the case for continuous professional development, working conditions, support to teachers facing difficulties, support for professional or geographical mobility and active participation of teachers in the decision-making processes of reforms. Also, very few countries have designed and implemented a coherent and sustainable (internal and external) communication strategy for improving the image and the prestige of the teaching profession.

Last but not least, *“salary adjustments in the last decade were not always effective to keep teachers’ purchasing power”* (EURYDICE, 2012a and 2012b) and they did not reduce the large differences of the salaries levels (in real terms) between countries (see Volume 2, chapter 3). Admittedly, it is true that the recent period of economic crisis has not facilitated an improvement of teachers’ salary conditions. Until the very recent period, *“in all countries, except in France and Greece, the statutory salaries in constant prices have been either increased or maintained at similar level as in 2000”* (EURYDICE, 2012a and 2012b). However, the recent financial and economic crisis (since 2010) had an important impact, especially in Greece, Ireland, Romania and Spain, but also to less extent in Iceland, Italy, Latvia and Portugal. In Estonia, given the very low level of teachers’ salaries, a specific effort was made to save the teachers from a cut in salaries that had been decided for other public sector employees.

Given the importance attributed to the level of salary for the attractiveness of the teaching profession by the various categories of stakeholders who responded to our questionnaire (see Volume 2, chapters 2 and 3 on the results of our online survey) the budget constraints imposed by the economic context are certainly a handicap for improving this attractiveness. However, other professions are also impacted and the rising unemployment can be a factor of increasing attractiveness of the teaching profession, especially in countries where teachers are civil servants or have another equivalent status with respect to the security of employment.

Another limit of the policies implemented in most countries is the absence of a long-term strategy of communication aiming at improving or strengthening the image of teachers and their prestige in society. The responses to the online questionnaire show that the declining prestige of the profession is ranked as the second factor for envisaging looking for another job and that enhancing this prestige would be a very important factor for improving the attractiveness of the profession.

Measures about salaries and other allowances

We just saw that the economic context did not allow reducing the important disparities among European countries concerning salaries (in real terms) but also the competitiveness of the teaching profession with respect to other professions requiring equivalent levels of qualification. In this respect also, the differences are huge between Cyprus and Portugal on the one hand and the Czech Republic, Estonia, Latvia, Lithuania and Slovakia on the other. Another limit in this respect is the fact that very few countries have developed specific scholarships or other allowances to student teachers in exchange of an engagement to be a teacher for a minimum number of years.

Measures for improving working conditions

The evolution has not been positive in most countries. Several countries have increased the number of pupils per class (Italy, Portugal, Slovakia, Spain) and/or increased the weekly workload of teachers (Cyprus, Greece, Hungary, Italy, Poland, Portugal and Turkey), while only a few countries took advantage of a decreasing number of children to decrease the number of pupils per class (Austria, Estonia, Hungary and Poland).

Despite a few initiatives (England, France) the support to teachers facing difficulties and to retrain for finding another job is far from meeting the expectations of teachers in all European countries.

Measures regarding the assessment of teachers

This type of measure is not so much an important factor of attractiveness for students as it is an important factor of retention of good teachers. The first key issue is to design methods of assessment that are relevant, transparent and acceptable by teachers (LOONEY, 2011). A second issue is the legitimacy of the persons in charge of the assessment. In France for instance, for pedagogical aspects, teachers accept the legitimacy of inspectors but not that of school heads. A third crucial issue is to what extent the assessment must be taken into account for remuneration and career advancement. Several countries have moved towards a remuneration based partially on merit despite the resistance of teacher unions: Belgium, Greece, Hungary, Portugal and Sweden. In some other countries the assessment has been for a long time taken into account for career advancement (Finland and France for instance). In some countries there is no assessment (Austria or Italy for example) or the assessment has no impact at all (Poland and Spain for instance).

Measures taken for improving the image/prestige of the teaching profession

A few countries have designed a coherent long-term strategy for promoting a positive image of the teaching profession in the society: Estonia, Ireland, Lithuania, Norway and Scotland.

Another few countries have undertaken some aspects of a long-term strategy of communication including publicity campaigns: England, France, some Länder in Germany and Sweden.

Most countries have not designed any communication strategy for improving the prestige of the teaching profession either because the image of the profession is

considered already very positive (Croatia, Cyprus, Finland, Iceland, Portugal and Spain) or mainly for budgetary reasons (Czech Republic, Greece, Romania, Slovakia and Turkey).

Chapter 2 – Overall results of the on-line survey

Aim of this chapter and main results

The main aim of this chapter is to provide a broad overview and summary of the quantitative data gathered in our online questionnaire. An in-depth analysis of the questions we posted and how they compare to the information we gathered from our interviews is included in volume 2. The survey data also inform the analysis in subsequent chapters in the second volume.

The purpose of questionnaire was to solicit answers to some fundamental questions: “Is the teaching profession still perceived as attractive? And what are the reasons for this positive or negative perception?” A series of almost identical questions was submitted to six categories of stakeholders, to take stock of all relevant opinions about the teaching profession (students, ITE students, teachers, teacher educators, education officials). More detailed information on stakeholders' attitudes were gathered through the qualitative survey complementing the online survey.

Problems related to accessing the required information:

The first result we would like to mention is the difficulty we experienced in accessing quantitative data which would have allowed us to pinpoint the reasons why the teaching profession is, or is not, considered attractive in the various countries included in this study.

Executive summary of the key aspects analysed by the questionnaire and the general trends

The teaching profession's attractiveness can be measured by analysing the desire to become a teacher (for future teachers) or to continue teaching (for practicing teachers). There seems to be general agreement that:

- The teaching profession suffers from a poor image among the general public and students.
- Even among students preparing for a teaching career, only a small majority believes they have made the right choice.
- This may be explained by the fact that the profession's image is inherently based on personal impressions of one's own education, from early child care to university. As users —and sometimes also victims—pupils are indeed well-placed to spot the difficulties inherent to the teaching profession. This lack of interest in the teaching profession is corroborated by the teachers themselves: the first striking result is that over one-third of teachers in all countries surveyed do not exclude the possibility of looking for another job, as indicated by affirmative responses to the statement, “*I might envisage looking for another job*” The main reasons cited for considering a different career are not so much linked to a low salary (especially in southern and eastern countries) as they are to the high workload, stress and the growing burden of responsibilities, which all affect the profession's attractiveness.

- Paradoxically, the possibility of switching to a different career tends to add to the teaching profession's attractiveness. Generally speaking, however, European countries seem to do little to inform their teachers about the possibility of changing jobs.

All respondents tend to consider the teaching profession as **very difficult** and therefore **request thorough training**. The profession's attractiveness hinges on **high-quality education** at three stages: during initial teacher education (ITE), at the induction stage (for early-career teachers) and throughout the teaching career (CPD).

ITE is generally deemed inadequate for providing future teachers with the right tools. This impression is shared by students and teacher educators alike, even though the latter are in charge of providing just that.

- What students care about most while preparing for their teaching careers is a **training framework in which well-structured practice and theoretical didactics/pedagogy with concurrent periods of training are complemented by support provided by experienced peers** (Mentoring). ITE must not be perceived as purely academic—there needs to be a strong link with experience in the field and in real-life scenarios. However, **practical experience alone cannot provide sufficient training**, mentoring and reflection are equally important.
- **The induction stage is the most problematic part of the teacher education curriculum.** The bulk of countries under scrutiny provide either no or an extremely short induction period, with little or no mentoring. Training induction for newly qualified teachers, however, is of prime importance for the profession's appeal.
- Shifting the teaching profession's focus back to its core duties: teaching and helping students to acquire knowledge and competences. All respondents in all categories consider the most important factors for an attractive profession are the fundamental objectives of teaching: "*Educate and transmit values*", "*Transmit knowledge*", "*Enjoy teaching certain school subjects*" and finally "*Do a socially useful job*". The symbolic value of the teaching profession needs to be reinforced among the general public. This is as important as improving the material working conditions.

On the whole, the response profiles vary widely among countries, and the perception of what makes the teaching profession attractive differs throughout Europe.

1. Analysis of the responses to category-specific questions

For each category, we only refer to results from countries for which we received a sufficiently significant number of responses. Where possible, we compensated for bias. If that proved impossible, we excluded the data from our analysis.

1.1. Students in humanities, languages, mathematics and science

1.1.1. General remarks

The difficulties inherent in the questionnaire's systematic dissemination among this population have led to highly fragmented replies. The responses we gathered therefore need to be handled with care. Only 11 countries yielded a significant number of replies: Austria, Croatia, Czech Republic, Finland, France, Germany, Italy, Poland, Romania, Slovenia, and Turkey. The number of responses per country range from 8 (SI) to 40882 (TR). We considered that the answers we received would only be meaningful if their number was proportionate to the country's population and — inasmuch as the information was available— to the country's category of respondents.

1.1.2. Analysis of the specific questions

What are the most attractive aspects of the teaching profession?

Comparisons with responses provided by initial teacher education students and teachers, both of whom responded to the same items, were not possible. The results clearly emphasise three items, which are selected either first or second by a significant number of students in the 11 countries analysed: "*Transmit knowledge*" and "*Educate and transmit values*". For the ones in 3rd and 4th place, the difference is so small that they can be said to be of equal weight: "*Enjoy teaching certain school subjects*" and "*Work with youngsters*."

Do you envisage enrolling in a professional programme to become a teacher?

Only a majority of Finnish, French and Romanian students affirm their intention to enter the teaching profession, while Slovenia records the highest number of negative replies. The remaining countries are evenly distributed between YES and NO.

The information available about the conditions of recruitment of teachers

To this question, a majority of students in all countries except Finland report having insufficient information about the recruitment conditions for teachers.

How did you build up your perception of the teaching profession?

In a majority of countries, the perception of the actual profession is first and foremost based on discussions with teachers during their studies and with the family environment as a second source. Neither the image conveyed by the media (less than 7%, with little variation), nor information campaigns (average response rate of 4%, little dispersion) appear to be significant, which is not surprising as far as most countries didn't have information campaigns. The impact of information campaigns and the image conveyed by the media are analysed in volume 2, chapter 6 on the "Prestige of the profession and social status of teachers".

The possibility for teachers to benefit from mobility abroad for at least one year during their career

In all countries, over 70% of replies are positive. For students mobility appears to contribute to the profession's attractiveness.

1.2. Students enrolled in initial teacher education

1.2.1. General remarks

Out of about 4,500 responses there was a more or less equal distribution among the two most significant levels of degree (Bachelor and Master's) and a balanced distribution of the students who are considering both the primary and secondary levels. A comparison with the standard student population is of little use given the small number (seven) of countries with sufficient replies of both populations: Austria, Finland, France, Germany, Hungary, Ireland, and Poland. The other countries with a sufficiently significant number of responses for this population are: Belgium, Greece, Slovakia, Spain and UK.

1.2.2. Analysis of the specific questions

When did you have the feeling that your decision to become a teacher was definitive?

In almost all countries, one third of these students said they made up their minds during their higher education curriculum. This was the case for over 50% in Greece, Ireland and the UK. On the other hand, the most paradoxical result is that almost one third of students training to become teachers respond that they are not sure whether their career decision is final. The response ratio to this question is at least 23% (except in the UK) and as high as 54% in Poland, and $\pm 40\%$ in Belgium, Finland, Hungary, and Slovakia. This item reveals a fact we shall deal with in volume 2, chapter 5. A significant number of students appear to embrace the teaching profession but still having doubts about the sustainability of their decision.

Do you know induction programmes for new teachers?

One of the key hypotheses of the present study is that the induction stage is the most problematic part of the teacher education curriculum. In fact a majority of students preparing for this career state they are unaware of such programmes (35%) or know too little about them (45%). Students in initial teacher education are, or believe they are, unaware of the realities of the induction period. The lowest "Yes" ratio was recorded in Belgium, Greece, Hungary, Poland and Spain. The UK is the only exception. These results and the induction programmes will be discussed further in the chapter on "Support, CPD and mobility" (volume 2, chapter 5).

What type of induction programme for beginning teachers seems to you the most relevant?

The answers to this question extend the previous one by clarifying it: they allow us to infer that students claiming to know too little about the induction programme do not actually tell us what they know but rather what they would like to see or expect. On the whole, they believe that the best way to support them would be to provide a mentor, i.e. "*to be mentored by an experienced teacher*" (85%, in 1st place in all sampled countries) rather than an instructor-tutor (17%, 2nd and 3rd place), presumably because such a person is not considered a seasoned professional (see the interviews analysis in Volume 2, chapter 5). It also appears that students are expecting a "*structured support programme lasting several months*" (20%, 2nd place in 7 countries out of 11), which clearly suggests that beginners want a coherent, structured, programme of personal and professional **in-service** support, or at least an effective dual training, where practice and reflecting on practice alternate **in the first year(s) of professional practice** (i.e. not just a "return to ITE", which is probably associated with additional academic education and therefore only welcomed in Greece). "On-line self-training", finally, is highly unpopular (3.5%)

The possibility for teachers to obtain assistance when they are considering changing to another profession, either in the field of education or outside education:

The question may seem paradoxical because it encourages students to wonder whether the possibility of leaving the teaching profession actually makes it more attractive! In all countries, the answer "rather or very important" scores over 80% on aggregate. We therefore need to reflect on what is commonly referred to as "external mobility". One may assume that future teachers do not wish to devote their entire career to teaching and that the possibility of using their experience for an altogether different profession needs to be analysed in detail by decision-makers (see Volume 2, chapter 5).

The possibility for teachers to benefit from mobility abroad for at least one year during their career:

This question was also submitted to students of the first category. Among future teachers, the general trend and reservations are the same: although the interest in career moves is confirmed (70% consider them rather or very important), we still need to establish whether this interest is related to the profession's specificities or just to the attractiveness of mobility in connection with any kind of professional career. The question regarding cross-border circulation and exchanges, which are no longer an exception and have become a source for recruitment and professional renewal, suggests that the existing mobility tools could be usefully further developed (see Volume 2, chapter 5).

What aspects of your professional training seem to best prepare you for your future job?

Overall the answers to this question are generally so diverse that no trend can be identified in the bulk of the countries with a sufficient number of replies (the highest score of any one item was 30%). Three items, however, rank first, second or third in

11 countries out of 12: "*Mentoring by trainers or experienced peers during internship*" is a clear first, followed by "*Practical training through internships within schools* (lecturing without a mentor in the class)", tying with "*Lectures and workshops on pedagogy and didactics*". The general direction of the answers seems to confirm that what students care about most while preparing for their teaching careers is a training framework in which well-structured practice and theoretical didactics/pedagogy training alternate and are complemented by support provided by experienced peers (Mentoring). The dispersion of replies also shows that any support at the induction stage is taken for granted as necessary by this particularly sensitive population, which constitutes the pool of future teachers (see Volume 2, chapter 4 on "Initial teacher education and recruitment").

When did you have the feeling that your decision to become a teacher was definitive?

This question has allowed us to establish more or less at which stage of the training programme students make the career decision to become teachers. In our sample, we were nevertheless surprised by two different country profiles: one group (Austria, France, Germany, Greece, Ireland, and UK) clearly favours the answer "*During my first year in higher education*", which seems to indicate that these students may have made an early choice. The long curriculum they chose (at least 5 years in these countries) clearly did not act as a deterrent. Their interest in the profession therefore seems to be based on a vocation that predates the discovery of the profession during their curriculum. The main choice of a second group is equally noteworthy: "*I am not sure yet whether it is a definitive choice*" (Belgium, Finland, Hungary, Poland, and Slovakia). As our sample only covers a part of Europe one must be aware of its limitations. It is nevertheless striking that in half the countries that returned a sufficient amount of replies in this category, future teachers admit they still have doubts about their choice. To find out more about the cause for this hesitation we need to consult other information sources, among them the in-depth interviews (see Volume 2, chapter 4).

1.3. Teachers

Even after discarding the countries with an insufficient number of replies, this is still the category with the highest number of responses; 22 countries had a sufficient number of responses in proportion to the population: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IS, IT, NL, PL, PT, RO, SK, TR). This is essentially due to the fact that in these countries we were able to send the questionnaire to professional e-mail addresses.

1.3.1. General remarks

The bulk of our respondents have been teachers for at least four years (over 80% on average). More than 9 out of 10 are civil servants at various levels, except in countries with a high number of teachers on private contracts: Greece (35%), Czech Republic (33%), The Netherlands and Spain ($\pm 25\%$), and Bulgaria ($\pm 20\%$). In most countries,

over 70% of teachers have no professional experience outside the education sector, meaning that their career choice was both precocious and exclusive. The following countries are exceptions, however: Czech Republic and Spain, and even more clear-cut in our sample, Greece and Iceland.

The question about access to the teaching profession allowed us to pinpoint the teachers' *subjective* impression about the *professional standard* of their training. They were asked to discuss two curriculum types: a university curriculum (without any specific indications) and vocational college or university departments that specialise in teacher education. The distribution of the replies reflects the perception of a clear difference between:

- A predominantly academic with weak hands-on Teacher Education curriculum usually of more than 4 years: AT, BE, BG, CY, DE, EL, ES, FR, HU, IT, PL, RO and TK;
- And a strongly professionalised curriculum in specialist institutions or specialised TE faculty: CZ, HR, DK, EE, FI, IS, NL, PT, and SK. The difference lies essentially in the closer link with the real world. Our reference model is akin to that for healthcare workers or engineers.

These data are discussed in Volume 2, chapter 4.

1.3.2. Analysis of the specific questions

Why did you decide to become a teacher?

Based on the hypotheses developed during our documentary studies, we selected 11 possible answers. For the 22 countries under scrutiny, the distribution of answers reveals 4 main items: "*Work with young people*" and "*Educate and transmit values*" received equal numbers of responses, followed by "*Transmit knowledge*" and "*Enjoy teaching certain school subjects*". The fundamental objectives of the teaching activity thus come first, while the social value ("*Do a socially useful job*") or intrinsic merit ("*Be relatively autonomous in one's job*") come second.

Among the answers that were selected least often are those related to the symbolic or financial status ("*A recognised social status*", "*Have a relatively attractive salary*") and job security ("*Security of employment*"), even though the majority of teachers are still civil servants. It should be noted, however, that these three replies are all the more significant because of a substantial dispersion—their scores are uniformly low (<10%) in all 22 countries.

The characterisation of countries based on the selected response types reveals that the teachers:

- In Hungary clearly favour "*Have more holidays and free time*";
- In Austria, Bulgaria, Cyprus, Estonia, Germany and Iceland like to "*Work with young people*";
- In France and Turkey focus on "*Transmit knowledge*";

- And in Greece, Italy, Portugal and Romania favour "*Educate and transmit values*".

Generally speaking, all 22 countries therefore exhibit a relative correlation. If one tries to amplify the differences, only two groups with diverging choices emerge: DE, EE, FI, HU, NL, and PL versus ES, IT, PT, RO, and TR. This shows a difference between northern and eastern countries versus the southern countries. These answers and their relevance for studying the profession's attractiveness are further analysed in various chapters of Volume 2.

What aspects of your initial professional education have helped you the most to face the demands of your profession?

This question was devised to substantiate the hypothesis that a curriculum perceived as inadequate for real life conditions might affect the perception of the profession's attractiveness.

Three answers tied in first place: "*Regular meetings with peers to exchange ideas about problems, solutions and pedagogic resources*", "*Specialised lectures*", "*Mentoring of a trainer or an experienced teacher in organising a teaching sequence*".

Active teachers seem to agree with students in these key matters. The three answers they selected indicate which aspects contributed to the attractiveness of their initial teacher education. Satisfactory initial teacher education alternates between academic education or specialised lectures and reflection on practice, which in turn is based on two highly appreciated approaches: regular meetings with peers, on the one hand, and mentoring by a trainer or an experienced teacher, on the other. Thus, the 'concurrent model' during initial teacher education seems to make the profession more attractive (see Volume 2, chapter 4).

Which aspects of induction for new teachers were most helpful?

This question is an extension of the previous one—it analyses the hypothesis according to which the induction programme's quality is crucial for the profession's attractiveness. The latter appears to depend on the perception that early-career teachers can count on good mentoring and training during their first years. Given that the induction stage is, in fact, an extension of university education, one might expect a preference for the same enablers at this stage.

In all 22 countries with a sufficiently high number of respondents, three items are selected most often, albeit in different orders, depending on the country. In any case, the deviation is too small to allow for a division of countries based on contrasted profiles. The items are the same as for the previous question. The one selected most often is: "*Mentoring of a trainer or an experienced teacher in organising a teaching sequence*", followed by "*Regular meetings with peers to exchange ideas about problems, solutions and pedagogic resources*", and finally "*Specialised lectures*". The comment is therefore the same: the teachers (most of them with some experience) conclude that what helped them most during their induction were approaches that strike a balance among three elements—first the possibility to share the specificity of

an experience with peers, which is a kind of self-training, but needs to be followed by mentoring by experienced trainers to corroborate and question such self-training. Finally, only in third place, they recognise the use of theoretical and academic education (specialised lectures...), but only if it evolves around the aforesaid two approaches.

During the career what are, according to you, the kinds of support most likely to help solving problems that you face as a teacher?

This question documents the hypothesis whereby the teaching profession's attractiveness increases if one can count on support when faced with the difficulties responsible for the profession's bad reputation, both within the professional field and among the general public (e.g. illiteracy, violence, early school leaving, etc.).

Teachers were asked to rank, from 1 to 3, five typical, but deliberately contrasted, forms of support for teachers: 1) self-training and collaborative work ("*Exchange and co-operate with peers*"); 2) training controlled from outside and based on a global analysis of the system's requirements ("*Meetings with trainers*"); 3) a kind of training that combines the previous two approaches and is rooted in local needs ("*In-service training sessions well adapted to one's needs*"); 4) the input of staff specialised in providing support for teachers facing difficulties, who are not instructors but rather "listeners" and advisors ("*Support from specialized staff in helping teachers meeting particular difficulties*"); 5) finally, the possibility to access digital resources, hotlines, etc. ("*On-line access to a website of resources*").

The answers can be easily analysed: in all 22 countries, the highest-ranking item (about 30% of all answers) is "*the possibility to exchange and co-operate with peers.*" Second place is shared almost equally by continuous professional development well adapted to one's needs and online help. This allows for the conclusion that active teachers are convinced that the best support measures are essentially based on solving local problems. These data will be commented on and put into perspective in the chapter about the impact of the attractiveness of in-continuous professional development (see Volume 2, chapter 5).

Should continuous professional development participation play a more prominent part?

This question solicited a straight YES/NO answer, followed by a ranking of various items. "Yes" was selected by a majority in all countries. This allows for the conclusion that, on the whole, teachers would like continuous professional development to be taken into account. Four options were proposed: 1) By having a faster progression of one's career; 2) By taking into account the time spent in training sessions in the statutory working hours; 3) By an extra remuneration; 4) By opening a new career in the education sector. The deviations are too small to identify the one that is clearly preferred. Teachers of all countries thus have differing opinions about continuous professional development.

Would you choose the same profession again today?

This question allows us to estimate the evolution of how the attractiveness is perceived by a teacher population with—as stated earlier—over four years of seniority and fully aware of the profession's attractive and repellent aspects. On a scale of 4, the dominant factor for all 22 countries is a solidly positive response (over 75% on average) characterised by significant differences once you start looking at the details: the countries with the highest "No" ratio (over 25%) are, in descending order: Portugal, France, Slovakia, Romania, followed by Estonia and Cyprus. For now, we shall disregard the unexpected score in Finland, where over 61% of teachers replied "No". A more thorough analysis will allow us to establish whether this is just bias or a significant anomaly.

Do you envisage in the future looking for another job?

The desire to leave the profession is an indicator of the risk of losing qualified teachers through resignation. This is an indirect indicator of the teaching profession's attractiveness.

The first striking result is that "Yes" ("*I might envisage looking for another job*") is almost carried by a majority: over one-third of teachers in all countries do not exclude the possibility of looking for another job. A more detailed look at the various countries reveals that the number of "Yes" answers exceeds 60% in 4 countries (out of 22)—Bulgaria, Cyprus, France and Greece (see Volume 2, chapter 5).

What do you think about the existing programmes to help teachers with changing profession?

An extension of the previous one, the purpose of this question was to fathom the amount of information available to teachers in a given country regarding programmes to help teachers retrain for a job in the field of education (school head, inspector, adult education, etc.) or outside. The hypothesis under scrutiny here states that a profession's attractiveness also depends both on the *internal career opportunities* it provides (which would require optimising human resource management by emphasising the value of experience), and *external opportunities*: any profession that allows people to gather experience that is appreciated in other areas is inherently likely to be more attractive.

In the 22 countries under scrutiny, the average of negative answers (*I do not know any programme to help with changing profession*) reaches 37% for retraining measures inside the education field and 45% for other areas. We will come back to these figures when looking at the questions that try to establish whether mobility opportunities enhance the profession's attractiveness through an effect that might be considered paradoxical, i.e. the *easier it is to leave the profession*, the more attractive it appears. There are serious deviations among countries, however, with little or no awareness of "internal" career opportunities in BG, EL, IT, and PL, while "external" opportunities are virtually unheard-of in BE, BG, CY, EL, HR, IS, IT, NL and PT. **Generally speaking, European countries seem to do little to inform their teachers about the possibility of changing jobs.** Indeed, the movement out of the sector can be viewed either negatively (teachers running away from a difficult

profession) or positively (putting the human qualities and skills acquired during their demanding teaching activity to good use in other areas). This will be further analysed in Volume 2, chapter 5.

If you were to envisage looking for another job, what would be the main reasons to do so?

In addition to exploring the *intention* to switch jobs, we also need to establish the *motivation* for such a move. Most teachers we interviewed—even those who said they had no intention to switch jobs—answered this question. Only one teacher in 10 said this question was irrelevant to them. The distribution of the items on offer varies slightly from one country to the next. Two items take centre stage: "*Looking for a better salary*" (BG, EE, IS, SK) and "*Degrading social image of the profession*" (AT, BE, CY, FR, IT, PT). These two are deemed equally important in three countries: HR, HU and RO. Other countries, like DE, DK, ES, TR, however, mainly emphasise items related to the workload ("*Increasing workload and responsibilities*" and "*Too much stress*"). These aspects are further analysed in Volume 2, chapter 3.

1.4. Teacher educators

1.4.1. General remarks

The teacher educator population is far more difficult to locate than teachers or students. The professional status of teacher educators indeed tends to vary from one country to the next or—in relatively decentralised EU countries (DE, UK)—among regions. Some of them are academics who are not employed by a faculty or education department, others are instructors employed either full-time or part-time by public or private institutions, schools that either do or do not accept students teachers for teaching practice, etc. The terms used to designate such persons already indicate the heterogeneity: trainers, tutors, supervisors, pedagogical advisors, mentors, trainers, etc. (EC/DG EAC, 2010b). Given that we cannot even begin to chart the differences among the various subcategories, we decided to consider our sample as indicative. 57% of the teacher educators interviewed train secondary level teachers, while the number of prospective primary level teachers is considerably higher. Full-time instructors, who are easier to locate thanks to institutional lists, are over-represented (67%).

We were only able to collect a sufficient number of responses in 8 countries (AT, BE, DE, ES, FR, IT, PT, and TR). Furthermore, those countries are only an imperfect reflection of the broader European economic and cultural typologies. The authors of the present report therefore decided to use the results for this population rather sparingly and to rely instead on the qualitative data derived from the interviews and creativity workshops, the usefulness of which is confirmed, for the comparison with other available surveys.

1.4.2. Analysis of the specific questions

Do you think that in your education system teacher educators are involved in the reform process?

This question was asked systematically during interviews, because it is based on an initial hypothesis developed during the documentary study: it appeared that involving staff in running and improving the education system at the national and/or local levels was considered crucial for a positive perception of the profession, i.e. for the recognition of their active role (ETZIONI, 1969; EC-DGEC, 2010b). Responses showing the difference between countries with a decentralised training system (AT, BE, DE and ES), usually dispensed at universities with a high degree of autonomy regarding the curriculum, and countries with little or no decentralisation and therefore little room for local initiatives (FR, IT, PT and TR) were to be expected. The interviews with instructors, who feel particularly involved in their work, revealed that these elements are the main determinants of their interest in the profession. The responses gathered from our sample appear to corroborate our hypothesis: in Germany, for instance, 70% stated that teacher educators are sufficiently involved in reforms, while in France and Italy only 2% believe they are.

Do you think that in your country the initial education of teachers/ the induction programmes is preparing them to face the current challenges of their work/to perform other tasks than teaching?

Among this population, we wanted to test the hypothesis that the quality of the initial teacher education and induction stages was an important determinant for the profession's attractiveness. Our partial sample duly delivered: the answers we received converge with those of other respondents (future and active teachers):

- Initial teacher education is deemed rather inefficient for the preparation of future teachers for their profession, except in Spain where the perceived advantages and disadvantages were equally rated;
- Induction programmes are, for the most part, deemed rather, or even very, unsatisfactory (60~80%);
- Practical training for teachers does not prepare them for carrying out tasks other than teaching.
- The ratio of negative answers exceeds 65% for all items in all countries.

What kinds of programmes are the most effective to help teachers faced with difficulties?

For this question, as for all previous ones, we only have fragmented responses but they nevertheless show a convergence with the other respondent categories asked about the tools available to teachers facing difficulties. The distribution of the answers received points to three equally important items: for teachers, "mentoring" is deemed as important as "continuous professional development" and—this may come as a surprise—"a reduced workload".

How do you assess the attractiveness of the teaching profession in your country? Does the initial education of teachers contribute to increase the attractiveness of the teaching profession?

The last two questions were directly related to the perception of the profession's attractiveness. We will have to look for a confirmation of what this incomplete sample suggests in other elements of our survey. We noted a contrast among the most strongly developed European countries where the teaching profession is considered fairly attractive by those in charge of educating teachers (over 85% in Belgium and France, for instance). They are also the ones who are most critical about their contribution to enhance the profession's attractiveness: in Belgium, France, Germany and Spain teacher education has no impact on the perceived attractiveness. This consensus is only questioned by the responses in Portugal or Turkey. Another possible assumption is: do general economic considerations affect interest in the teaching profession? It would appear that the actors most directly concerned by the recruitment and training procedures for teachers in the richest countries would also be most sceptical about the merit of the profession they are preparing for.

1.5. School Heads

1.5.1. Opening remarks

With 11,773 replies, our sample of school heads is the second largest of our survey, yet we were only able to process the data of 14 countries (AT, BG, CZ, DE, ES, FI, FR, IS, IT, NL, PT, RO, SK and TK). The high rate of response is due to the fact that this group of respondents is used to replying to quantitative surveys, that their e-mail addresses are readily available, and that they have the greatest interest in recruiting good teachers. Among the school heads surveyed 15% are in charge of institutions with more than 1000 pupils, while the remainder supervise institutions with 300~1000 (45%) and fewer than 300 pupils (40%). Their status is extremely varied: in certain countries, a large majority has no teaching duties (IT, NL, PT, and TK), while in others, they still teach part-time (BG, CZ, DE, ES, FI, RO, and SK). In our sample, more than one school head in 10 is a former teacher, the only exceptions being BG, CZ, PT, and NL (where over 10% of school heads come from outside the education sector).

1.5.2. Analysis of the specific questions

Do you think that teachers who have been recruited during the last 3 years are prepared for teaching?

This is a crucial question for any school head. Even though in all countries with a significant amount of responses, "Yes" and "No" are broadly equal, the differences at country level are more striking. AT, CZ, ES, FI, IS and PT recorded a strong "Yes" majority. The opposite applies to BG, FR, IT and RO.

Do you think that they are sufficiently prepared to perform other tasks (student guidance, mentorship, relations with parents, participation to the school development plan, etc.)?

This question tests the hypothesis—already confirmed by teachers—that the rising difficulties perceived by teachers are attributed to a rising number of peripheral tasks. This impression is corroborated by school heads: 60% of school heads (over 70% in Austria, Germany and Italy) believe that teachers come insufficiently prepared for duties other than teaching and hence consider the profession more difficult and less attractive, especially those who chose to become teachers out of a desire to transmit knowledge and values (Volume 2, chapter 5).

Do you believe that the possibility for teachers to seek assistance with finding another job either in the field of education or outside education is important?

For 7~9 school heads out of 10 (depending on the country), external mobility options contribute to the profession's attractiveness. This confirms the results recorded among future and active teachers.

1.6. Local, regional and national authorities

For this category, our sampling efforts proved even more difficult than for teacher educators. Depending on the country, the decision-makers in charge of organising, recruiting, etc., are to be found at the national level (mainly in highly centralised countries, like France, Italy and Turkey), at regional level (Germany and Spain) or among local authorities or institutions (Belgium, Finland, The Netherlands, and UK). Quantitative comparisons of the opinions voiced by the persons concerned are not possible, given the highly heterogeneous samples. This explains why we resorted to interviewing persons in charge of education policy at the national level (political or administrative advisors to the relevant ministers) or the regional or local level, as appropriate.

2. Analysis of the questions submitted to several categories of respondents

This section analyses the two questions submitted to more than one category:

- One question was submitted to all six categories: "*What types of change are most likely to make the teaching profession more attractive?*"
- A second question was submitted to three categories (future teachers, active teachers and school heads): "*What aspects make the teaching profession particularly tough?*"

2.1. Analysis of the responses to the question: "What types of change are most likely to make the teaching profession more attractive?"

This is the only question with an explicit reference to the notion of attractiveness. It was submitted to all six respondent categories. The analysis should allow for a general overview of the answers, beginning with the best represented and most significant category: "teachers", who are particularly well placed to judge the effect of change on the negative/positive perception of their profession.

2.1.1. How did teachers in 22 countries answer this question?

The data table only allows for a partial interpretation, such as the identification of the most popular answers: "*A higher salary*" and "*A more recognised social status/better image of the profession*", "*Fewer students per class*", "*Better working conditions*". This approach will be covered in Volume 2, chapter 3 (Salaries and working conditions) and Volume 2, chapter 6 (Prestige of the profession and social status), based on two rather different strategies for making the profession more attractive—one rooted in financial considerations, i.e. a higher relative salary, the other derived from symbolic elements, i.e. a better social image of the profession.

Are there any correlations between these answers at a European level, i.e. beyond individual countries?

We noted that "*Less heterogeneity among students within a class*" and "*A highly qualified profession*" are correlated and are often associated in the answers received. "*Better induction for beginning teachers*" and "*A higher salary*", on the other hand, exhibit a negative correlation: they appear to be mutually exclusive. It is striking to note that material considerations (salary, working conditions) are not always considered as significant as job-related considerations (higher qualification, qualification requiring training, teamwork).

Does it make sense to group the countries according to the answers they tend to favour?

Our data do not allow us to clearly identify groups of countries with similar or contrasting profiles for all items. The dispersion of the replies is such that only Austria, Belgium, France and Italy can be said to provide similar answers to the different items. Our qualitative analysis will allow us to establish whether these matches are due to comparable determinants of attractiveness.

A more detailed look reveals that only five items score highly among the answers and therefore allow us to isolate partially comparable response profiles: Cyprus and Bulgaria (almost 20%) and, to a lesser extent, Croatia (over 12%) are the only countries where "*A more highly qualified profession*" scores high. In the remaining countries, this answer is selected by less than 3%, while four other items score high: in Germany, Portugal and Spain, the most popular choice is "*Fewer students per class*". The Czech Republic, Estonia, Hungary, Iceland, Romania and Turkey select "*A higher salary*" (over a quarter of all answers). Teachers in Cyprus and Denmark favour

considerations related to initial and continuous professional development: "*Better induction for new teachers*", "*More teamwork within the school*", "*A better continuous professional development*". These results must be checked against educational policy decisions.

On the whole, the response profiles vary widely among countries and the perception of what makes the teaching profession attractive differs throughout Europe. The recommendations regarding the most beneficial political measures can probably be contained in a single list, but the implementation will have to take into account local specificities. Nevertheless, the bottom line is a contrast between two types of possible measures: those that help to improve the material conditions (salaries and working conditions) and those—rather more original—related to the symbolic level: improving the profession's image in society at large.

2.1.2. Are the differences in the answers to the question based on stages of schooling?

Primary and secondary school teachers clearly select the same three answers out of 13 (scoring more than $\pm 15\%$). In descending order: "*A more recognised social status/ better image of the profession*", "*A higher salary*", and "*Fewer students per class*". The scores of these answers differ by less than 1% for both levels.

2.1.3. Do the various categories of respondents select different types of change?

Comparing the response profiles based on the category of respondents, the Principal Components Analysis (PCA) and the Correspondence Factor Analysis (CFA) show a relatively clear-cut dispersion of the response profiles. For each category, the answers are distributed differently among the proposed items and therefore do not allow us to isolate a common profile. The only observations worth mentioning are:

- "*Better continuous professional development*" and "*More opportunities of professional upward mobility*" are shared by the three staff categories: school heads, teacher educators and representatives of local authorities.
- The answers submitted by the two student categories correlate; their response profile is not affected by whether or not they are already attending initial teacher education ('salary' and 'the number of pupils per class' score highest).
- Active teachers provide slightly different answers, trainers deviate even more, followed by school heads, and finally, the answers provided by local officials are most remote from those given by students.

Which items differentiate the response profiles of these categories?

- School heads suggest improving the profession's attractiveness through an enhanced social image and a higher symbolic status ("*A more recognised social status/ better image of the profession*");

- Local authorities believe teacher qualifications ("*A more highly qualified profession*") to be the best indicator of attractiveness, which can be attributed to their training;
- Active teachers point to aspects closer to the reality of everyday teaching: they favour *less heterogeneity among students within a class* and *more teamwork within the school*.

2.1.4. What is the influence of age (less/more than 4 years of experience) and gender on the responses?

Irrespective of age and gender, the profession's public image and its financial rewards (salary) rank way above material working conditions. The answers to the items reveal first and foremost the desire for change: "*A more recognised social status/better image of the profession*", "*A higher salary*", and finally "*Fewer students per class*", whose score is close to that of "*Better working conditions*". Our analysis reveals only slight variations of these response profiles for the various seniority and gender groups. It is therefore safe to conclude that both male and female teachers, experienced or not, have the same requests. There is, however, one exception: male seniors believe that "*initial teacher education more adapted to the real job*" is the second most important change that needs to be implemented. The remaining categories select this item significantly less often than the first-tier items.

2.1.5. Responses in the various European regions

The 22 countries were divided into four regions: west, south, north and east to find out whether there are region-specific differences among the answers. The results appear in table 3.1. There is obviously a strong correlation among the answers given in eastern and southern countries. The most striking differences are between western and the remaining countries. Our analysis shows that eastern countries clearly favour "*A higher salary*", while western countries predominantly select "*Fewer students per class*", and both western and eastern countries choose "*A more recognised social status/better image of the profession*". There is no dominant region for "*Better working conditions*". "*A more highly qualified profession*", finally, is not high on the southern agenda. The most popular items selected in the various regions therefore seem to match the map.

Table 2.1: Responses to the question "What types of change..." in European regions (%)

		W	S	N	E
More opportunities of professional upward mobility	A1	7.51	6.78	5.40	5.08
More teamwork within the school	A2	3.53	5.59	6.86	3.87
Less heterogeneity among students within a class	A3	4.00	4.08	6.82	5.77
Fewer students per class	A4	16.24	11.40	14.84	10.70
Better working conditions	A5	9.98	9.16	6.79	8.49
Better induction for beginning teachers	A6	5.65	3.21	2.89	2.63
A highly qualified profession	A7	1.40	7.89	2.98	5.47
A higher salary	A8	15.99	17.97	21.70	23.24
A more recognised social status/better image of the profession	A9	20.50	14.73	17.19	19.46
An initial teacher education more adapted to the real job	A10	7.96	7.25	5.98	4.54
A better continuous professional development	A11	3.63	6.55	3.25	3.62
More autonomy in the job	A12	2.71	3.69	2.36	3.69
Others	A13	0.90	1.69	2.94	2.74

2.2. Analysis of the responses to the question "What aspects make the teaching profession particularly tough?"

2.2.1. How did teachers in 22 countries answer the question?

Our data show that five items score highest: "*Excessive workload besides teaching*", "*The insufficient institutional recognition of teachers' efforts*", "*Too many students per class*", "*The methods of assessment of teachers*", "*The lack of discipline and motivation to learn by some students*". In summary, the items most often selected are related to the workload and teachers seem to think this is largely ignored by institutions, while teachers also suffer the burden of increasingly thorough assessments of their performance. This workload is defined by three factors: the pupils' negative attitudes, a high pupil/teacher ratio and assignments in addition to the teaching activity. Our correlation analysis reveals two items: "*The methods of assessment of the teachers*" and "*The attitude of parents*". This would suggest that the pressure of institutional monitoring (assessment) and social pressure (parents' expectations) contribute to the impression that teaching is hard work.

A detailed analysis of the answers submitted in the various countries to isolate groups or contrasts reveals that there are few marked differences. Some countries appear to favour a single item: Cyprus, for instance, gives preference to "*The attitude of parents*", which has a more or less normal distribution in the remaining countries;

Italy is characterised by "*The insufficient institutional recognition of teachers' effort*"; Finland and the Netherlands agree on "*Too much work besides teaching*". Our qualitative analysis will somewhat clarify what such trends suggest. We therefore need to confront them with a more detailed analysis of the measures taken in the various countries.

2.2.2. Are there differences in the responses of various categories?

The same question was asked to students in initial teacher education, active teachers and school heads. Let us compare the response profiles of these three categories. First and foremost, all three categories provide correlated answers: "*The lack of support of teachers who are meeting some difficulties*" and "*The constraints related to too demanding prescribed curricula and syllabi*", on the one hand; "*Too much heterogeneity of the students within a class*" and "*The lack of discipline and motivation to learn by some students*", on the other hand. Two elements appear to be at work in the perception of the profession's difficulties: demanding programmes, with little help for teachers facing difficulties; and the attitude of pupils, which is amplified by their sheer number.

"*Too much stress*" and "*Too many students per class*", however, exhibit a negative correlation: those who select one of these two items exclude the other, even though one might think that the stress factor is partly due to the pupil/teacher ratio. There seems to be no connection between these two.

The main items cited as explanations for the profession's difficulties (and hence for its lack of attractiveness) are:

- School Heads: "*Too much stress*";
- Initial teacher-education students: "*The lack of support of teachers who are meeting some difficulties*", "*The constraints brought by national and international assessments*", "*The constraints related to too demanding prescribed curricula and syllabi*";
- Active teachers: "*Excessive workload besides teaching*" and "*The insufficient institutional recognition of teachers' efforts*".

The apprehensions of each category thus seem to be in line with their proximity to real life teaching. While initial teacher-education students worry about the curriculum's constraints, assessments, and the lack of support when facing difficulties, active teachers mention the heavy burden of "invisible" assignments outside the classroom and the lack of recognition of their performance by their employers. School Heads seem to look at the broader picture and tend to attribute difficulties to "stress".

3. Conclusions

In summary, this chapter has presented the main results of our online questionnaire, with a view to verifying our initial hypotheses based on findings of our document review.

The quantitative study shows that the response profile for the various categories varies greatly among the countries we surveyed. Developing general rules is extremely difficult, because the aspects associated with the profession's attractiveness vary from one country to the next, usually along the lines of the overall economic climate and the availability of initial teacher education and continuous professional development. In places where such education and training are deemed efficient, the profession appears to be more attractive, even though the difficulties associated with the profession are perceived similarly in all European countries.

At this stage, we can only conclude that the online questionnaire has allowed us to verify the hypotheses we had devised following our document review. The various aspects that affect the profession's attractiveness will be covered in detail in the chapters of volume 2. Finally, we will compare the replies to our online questionnaire with the qualitative responses from our one-on-one interviews and creativity workshops.

Below is a list of the key issues to consider in developing policy measures to improve the profession's attractiveness. See our chapter 3 for the recommendations these findings appear to suggest. Taken together, these results suggest that policymakers should:

- 1) set up in each EU Member state an attractiveness observatory with sufficient funding and manpower to perform systematic surveys among the source population (students in general, would-be teachers).
- 2) improve teachers' working conditions (workload, pupil-teacher ratio, salaries, etc.), because a negative or positive image first and foremost depends on how pupils view their own teachers' work;
- 3) provide a sufficient initial teacher education (ITE) with an induction phase based on the following principles: a sound balance of practice and preparation for real-life activity, peer exchanges and in-service initiatives to complement theoretical training;
- 4) provide mentoring for teachers in difficulty through peer exchanges (preferably involving active teachers) rather than "classes"—irrespective of how competent the instructor is;
- 5) organise and structure training and assessment of competences for teacher educators within each country
- 6) inform teachers about career opportunities, either within the education sector or elsewhere, and encourage their professional ambitions.

Chapter 3 - Main findings of the study and recommendations

1. Main findings of the study

1.1. A diversified shortage of qualified teachers in Europe (volume 2, chapter 2)

There are very few official data regarding the current and future shortage of qualified teachers in European countries. Most of the information for this study was therefore gathered in our interviews.

We can distinguish two groups of countries (or education systems):

- **12 countries have a global shortage of qualified teachers:** Austria, Belgium (fr), Denmark, Germany, Italy, Luxembourg, The Netherlands, Romania, Slovenia, Slovakia, Sweden and Turkey
- **20 countries have no global shortage of qualified teachers:** Belgium (nl), Bulgaria, Croatia, Cyprus, Czech Republic, England, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Malta, Poland, Portugal, Scotland and Spain. In these countries, shortage of teachers is limited to certain subjects or geographical areas.

In the countries of the second group supply of teachers outstrips demand. On the whole, the teaching profession is still considered attractive for economic reasons, mainly job stability: CY, HR, ES, EL, IS, HU, IE, and PL. Following an analysis of future needs, certain countries started recruiting more vigorously over the last few years: Spain and France. Various provisions which were either already in place or made fairly recently have improved or maintained the profession's attractiveness despite highly selective recruitment criteria: FI, LU, IE, LV, MT and UK. In these countries—especially in Finland and Ireland—the profession still enjoys a largely attractive image. If there is a shortage in this group, it is mostly confined to specific rural areas or subjects (mathematics, sciences, languages, ICT and some technological disciplines) or special needs teaching positions.

Some of the countries of the first group that suffer from a general shortage of qualified teachers present the following characteristics:

- A rather old (AT, BE, NL, NO) or very old (DE, IT, SE) teacher population
- Working conditions and/or salaries that make the profession rather unattractive (RO, SK, TR), and so lead to a rather high drop-out rate.

The impact of several factors accentuates this shortage in different ways:

- **Demographic factors** where age and gender combine (a highly feminised profession in some countries, and women often retiring earlier than men).

- **A decrease in the number of students who wish to become teachers**, a phenomenon common to a majority of European countries. This **decrease** also affects the profession's attractiveness (also in countries of the second group).
- **A competition for positions at the school level** (in almost all countries), **at regional level** (German Länder, for instance) **or even at national level** (e.g. Austrian teachers moving to Germany, Ukrainian teachers moving to Poland).
- **An attrition of qualified teachers** (largely uncharted in Europe) **along with a relatively high drop-out rate of early career teachers** (up to 10% in some countries). The following reasons were given the most often for the disillusionment with the profession in the discussions with future as well as with early career teachers during our creativity workshops:
 - the stark difference between the idea of what the job would be like and real life
 - a difficult career start with little or no mentoring
 - a workload deemed too high with respect to the salary.

Many countries resort to an increasing number of levers to confine or regulate the shortage (higher numbers of pupils per class, longer working hours for teachers, retirement at a later age, or a variable number of entries for recruitment competitive examinations where they exist (i.e. in France, Italy, Portugal and Spain). These criteria affect the profession's attractiveness and might become counterproductive, especially if salaries are also lowered because of the economic situation (Greece, Portugal and Spain).

Some countries are facing a 'hidden or concealed shortage' of qualified teachers, which is usually due to contracts with staff who lack the required qualifications (Belgium, France, Italy and Poland) that are either used occasionally or are structural in the system (mainly in Italy). The claims of such countries that there is no shortage should therefore not be taken literally.

Few European countries have developed a system that would allow them to anticipate a shortage of qualified teachers and act accordingly. In areas where such data exist, national or regional education bodies are usually reluctant to communicate about the shortage, for fear that such information might be used for political reasons.

All in all, the shortage of qualified teachers results from the interaction of several factors, as stated previously in this study, and this affects the profession's attractiveness on a European level (with Finland and Ireland as the only exceptions):

- The profession is in a crisis and suffers from a tainted image, it gets little recognition from society and in addition salaries are rather low (Luxembourg is an exception) (see volume 2, chapters 3 and 6).
- The working conditions and salaries are deemed insufficient in a majority of countries (volume 2, chapter 3, sections 1 and 2).
- Initial teacher education is mostly considered an insufficient preparation for the profession (volume 2, chapter 4, section 1).

- Early career mentoring is considered substandard (volume 2, chapter 5, section 1).
- Continuous professional development is deemed patchy and rather heterogeneous, depending on the countries (volume 2, chapter 5, section 2).
- Human resource management does not take enough into account individual teachers’ characteristics (volume 2, chapters 3, section 3 and chapter 5).

Table 3.1

Heterogeneous situations with respect to the shortage of qualified teachers			
	Currently an absence of a <u>global</u> shortage of qualified teachers	Current <u>global</u> shortage at all ISCED levels	Countries with an ageing teacher population (at least a quarter of all active teachers are 50 and over)
BE		+	+
CZ	+		
DE		+	+
IE	+		+
EL	+		
ES	+		+
FR	+		+
IT		+	+
CY	+		
LT	+		+
LU		+	+
HU	+		
MT	+		+
NL		+	
AT		+	+
PL	+		
PT	+		
RO		+	+
SK		+	+
UK	+		
FI	+		+
SE		+	+
IS	+		+
NO		+	
HR	+		
TR	+		

Additional notes: *For Belgium, Estonia and Slovenia, the data we gathered are too fragmented to conclude whether or not these countries are facing a shortage of qualified teachers. Despite high salaries, Luxembourg is lacking qualified science and mathematics teachers. Germany (> 50%), Italy (47.4%) and Sweden (45.3%) have a high percentage of teachers aged 50 and over.*

1.2. Widely different salary policies in Europe (volume 2, chapter 3)

The hypothesis that salaries are an important aspect for a profession's attractiveness (even though the choice of many students may be related to a vocation) is confirmed by the answers to the online questionnaire provided by almost all actors, and obviously by the teachers themselves. The interviews and creativity workshops as well as the reports, studies and articles analysed are in agreement with this finding. This applies to all countries, including those where teachers' salaries are well above the European average. Nevertheless, the salary issue is not a priority in Germany, despite the different appreciations in the various Länder and differing policies (Berlin is deemed least attractive, though).

The analysis of Eurydice's and the OECD's 2009 statistics reveals considerable discrepancies in real earnings (calculation based on purchasing power parity) among European countries (volume 2, chapter 3, section 1, table 3.1). Luxembourg stands out with exceptionally high salaries. The salary of an upper secondary teacher, for instance, is 9 times that of a colleague in the Slovak Republic. Yet, the difference between high salary countries (Germany, Ireland and Portugal, for instance) and countries where salaries are modest (Hungary, Poland and the Slovak Republic) is even more significant. The analysis also reveals important pay discrepancies for primary and secondary level teachers: only in 9 countries out of 22, primary and secondary level teachers earn the same. There are also significant career path differences, with a steeper salary progression in certain countries (Austria, France and Luxembourg). In other countries such a progression is rather shallow (Denmark, Iceland and Norway). Finally, there are also significant differences regarding the seniority required for the maximum salary for a given status.

These three aspects regarding wage policy allow us to distinguish six groups of countries (chapter 3, section 1, vol. 2), with two extremes: on the one hand there are countries with the most attractive wage policy (Ireland, Luxembourg, the Netherlands and Portugal) and, on the other hand, countries with few financial incentives for teachers (Estonia and Slovakia). Some of the countries (Germany, Denmark, Spain and Norway) pay relatively high salaries almost from the start, but then provide little progression.

Bearing in mind the striking differences in the number of annual teaching hours (volume 2, chapter 3, section 1, table 3.2), the hourly rate for classroom presence (volume 2, chapter 3, section 1, table 3.3) is equally diverse (even disregarding Luxembourg): the hourly rate of a primary level teacher in Denmark is 5 times that of Slovakia, while the hourly rate of an upper secondary level teacher is 5.5 times that of Hungary. There are, in fact, four groups of countries:

- Those with a salary per hour significantly higher than the EU average: Luxembourg, Denmark, England, Germany, Ireland, Belgium Fr., Finland, Scotland, Norway, Greece and Belgium Fl.;
- Those with a salary slightly higher than the EU average: Austria, the Netherlands, Spain and Iceland;
- Those with a salary slightly lower than the EU average: Slovenia, Portugal, Italy and Turkey;
- Those with a salary significantly lower than the EU average: France, Poland, Czech Republic, Estonia, Hungary and the Slovak Republic.

This distribution, which is not related to annual raises, may come as a surprise, because it does not correspond to the living standards of these countries (GDP/head), or to certain received ideas regarding the teachers' relative situation, as can be inferred from the demands teachers' unions make or the answers to our online survey. Even in countries with high hourly rates, teachers state that raising salaries would make the profession more attractive. These conclusions should not be taken at face value, because it is necessary to look at the workload of teachers, especially the number of hours teachers are expected to be on the school's premises.

There are also differences in the ways countries treat teachers of different levels, like ISCED 1 and ISCED 3, for instance. Another interesting aspect of teachers' salary policies among countries is the difference between the hourly salary in primary and in upper secondary education. With respect to the ratio R3 (volume 2, chapter 3, section 1, last column of table 3.3) it is possible to distinguish three groups of countries:

- Those where the hourly salary is about the same (or the same) at both levels of education: England (which is an exception with a salary slightly lower in upper secondary education), Estonia, Hungary, Iceland, Portugal, Scotland, Slovenia and Turkey.
- Those with a difference that is around the EU average ($R3 = 1.38$): Austria, Czech Republic, Finland, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Poland, Slovak Republic and Spain;
- Those with a significantly larger difference ($R3 > 1.50$): Belgium Fl, Belgium Fr, Denmark (largest difference with $R3 = 1.97$), France and Luxembourg.

It would be interesting to check whether there is an impact of the differences in national policies on the relative shortage of teachers at primary and secondary levels, even though it is difficult to isolate such an impact from all the other factors.

With respect to salary evolution between 2000 and 2009, there are again four groups of countries:

- Countries with an important increase of real salaries : Bulgaria, Czech Republic (mainly ISCED1), Estonia, Hungary (mainly ISCED1), Iceland (ISCED1), Latvia, Luxembourg (ISCED1), Romania (mainly ISCED3), Slovakia and Turkey;
- Countries with a significant increase of real salaries : Cyprus, Ireland, Lithuania, Malta, UK/Scotland, Slovenia, Spain (only for ISCED1) and Norway;

- Countries with a stability of real salaries : Austria, Belgium Fl., Belgium Fr., Denmark (ISCED1), Finland, Germany, Italy, Netherlands, Poland, Portugal, Sweden, UK (England, Wales, Northern Ireland)
- Countries with a decrease of real salary: Denmark (ISCED3), France (mainly ISCED3) and Greece.

The recent financial and economic crisis (2010 - 2012) had an important impact on the evolution of salaries in many European countries, particularly in Greece, Ireland, Romania and Spain.

Another important aspect of salary policy is taking into account teachers' performances, which is an important element for human resource management. Although unions are often opposed to the "performance-based salary" principle, a growing number of teachers are warming to the idea, provided the criteria are transparent and fair, which implicitly means that there is a need to establish adequate criteria for evaluating the quality of teachers. Once in place, such a system is considered acceptable and could therefore contribute to teachers' effectiveness and the profession's image. More generally, this quality issue is not merely related to pay, but also to **career plans**, i.e. an evolution of the status of the most conscientious and competent teachers.

Finally, respondents and interviewees in several countries voiced their wish that the cost of living close to their workplace and the difficulties inherent to their activity (disadvantaged environments, difficult neighbourhood, etc.) be taken into account. France, for instance, already has such a system, with special provisions for "difficult" schools and "priority education areas."

The number of pupils per class is usually not considered a very important element in public opinion. It does matter to teachers in all countries, especially those where teacher salaries are relatively high (Germany and Finland)

1.3. Policies related to working conditions (volume 2, chapter 3, section 2)

The working conditions encompass a number of aspects that affect the profession's attractiveness. Given the impossibility of an in-depth analysis of all aspects mentioned in volume 2, chapter 3, we only cite the conclusions and proposals that have the biggest impact on this attractiveness.

Better material conditions are an attractive asset and deemed the fourth most important aspect after pay, social status and the number of pupils per class. There are few data for a comparison of international material conditions, except for ICT and multimedia equipment. Material conditions need to be considered in line with new teaching roles and teachers' expectations.

The workload on top of the teaching activity and the growing number of responsibilities is also deemed an important factor that makes teaching more difficult in certain countries: the Netherlands, Finland, Portugal, Denmark and Iceland,

for instance. In some countries, it is one of the main drivers for possibly looking for a different job: Estonia, France, the Netherlands, Finland and Poland.

The number of pupils per class is usually not considered a very important element in public opinion. But, it does matter to teachers in all countries, especially those where teacher salaries are relatively high (Germany and Finland) and in those with unattractive pupil-teacher ratios (volume 2, chapter 3, section 1, table 3.4): France, Germany, Slovak Republic, Turkey and UK. The number of pupils per class varies strongly among countries, but is not necessarily considered a drawback. This is only the case in half the countries (as in Germany, Finland, France and the UK). In Iceland, on the other hand, it is considered a serious issue despite the fact that pupil-teacher ratios are already much lower than in other European countries.

The heterogeneity of classes is not considered an important element for gauging the profession's attractiveness. Only teachers in Bulgaria and Finland, and—albeit to a lesser extent—in Estonia, Croatia, Poland and Spain tend to believe it is. It is nevertheless considered an important factor that contributes to making the teaching activity more difficult in a few other countries: the Netherlands, Italy, Greece, Iceland, Germany and France.

The increasing importance of teacher teamwork, which is noticeable in most European countries, is not deemed to have a major effect on the profession's attractiveness, irrespective of the country and the category of actors. However, Bulgarian and Dutch teachers seem to consider it slightly more important (online survey).

The pressure created by the multiplication of standardised tests (on the national and international levels) with a view to assessing pupils' attainment (especially for the ISCED 1 and 2 levels) concerns some interviewees (especially in England), but it is not yet considered an important negative factor, except perhaps by some teachers in Poland.

The changes in the pupils' and parents' attitudes and behaviour, as well as the loss of authority among teachers are deemed relatively important for the profession's evolution and its image among the general public. Yet, this perception varies from one country to the next (online survey). The lack of discipline and motivation among students is considered relatively important, except in nine countries: Germany, Belgium, Austria, Denmark, Czech Republic, Spain, France and Portugal. In Turkey, it is deemed all but irrelevant. The evolution of the parents' attitude, which is perceived as becoming increasingly uncooperative, is considered important in six countries: Bulgaria, Cyprus, Croatia, Denmark, Estonia and Spain. The interviews provided more information about this aspect in addition to the responses to the questionnaire. In Finland, for instance, several interviewees pointed out that parents are becoming more demanding in spite of the good results of Finnish pupils in international tests.

The rise of the stress factor and the risk of burnout among teachers have triggered several national and international studies to investigate into the symptoms of this phenomenon and its causes, among them the European studies cited in volume 2, chapter 3, section 2. The answers to the two questions of our online questionnaire related to this aspect show the importance of this problem in some countries

(Germany, Iceland, Romania and Slovakia). In Austria and Cyprus, on the other hand, it is perceived as a minor issue.

1.4. An evolution of roles and responsibilities of teachers (volume 2, chapter 3)

Another important aspect for the profession's attractiveness and social image is related to the renewal of teachers' roles and a trend towards more autonomy of schools. In a fast-changing world, teachers are expected to deliver ever more and to be knowledgeable about those changes, or even to anticipate new expectations regarding their knowledge and competences. To this end, teachers are requested to innovate, to change their teaching approach, to be more responsive to the pupils' individual needs and to help them succeed, to use ICTs, to work in teams, to apply more inductive approaches, but also to tackle all social problems (health education, environmental education, citizenship education, etc.).

This rising number of roles leads to more responsibilities, while most teachers feel that it is increasingly difficult to carry them out given their loss of authority, which is partly linked to a lack of recognition of their additional roles and responsibilities by society at large or the authorities in charge of education, and to a lack of support. At the same time, schools are becoming increasingly autonomous, which does not necessarily mean that this is also true of the teachers themselves. We noted, for instance, that a great number of teachers in a majority of countries are not too enthusiastic about new roles if they do not lead to more autonomy in their work. The situation in Finland and Ireland is considered the model to be copied: teachers are relatively autonomous and are viewed by society as being "real professionals" which provides them with a social status and prestige that encourages them to improve even further.

Another crucial issue: involving teachers in the reform process

Involving teachers in consultations leading to new reforms is crucial for the successful implementation of such reforms. It is also a way of instilling a greater sense of professionalism into teachers. It would appear that they are involved increasingly and earlier in discussions leading to new reforms, especially those related to the curriculum. Although this is happening all over Europe, Finland, Ireland and also France and Norway are relatively exemplary in this respect.

1.5. Teacher promotion and evaluation criteria: a major concern (volume 2, chapter 3)

This is a crucial and complex question which was frequently mentioned during the interviews and workshops. A transparent and relevant system for the appraisal of teachers' work is important for increasing the education system's effectiveness as well as teachers' professionalism and image. Good teachers need to be encouraged to become even better and also compensated for their efforts in one way or another. The system should be able to rapidly identify teachers who do not have the required pedagogical skills with a view to helping them improve or—in some cases—find a different occupation. Although most unions do not like the idea of performance-based salaries, they seem to accept an evaluation system that leads to some form of career advancement, especially if they are involved in the promotion process and trust the criteria that are used. This makes it all the more worthwhile to research and study the

modes and tools used to assess teacher performance and to turn it into an efficient instrument for improving the quality of teachers and their image in society. This would involve analysing the findings of studies, like the one based on the PISA data (case study, volume 2, chapter 3, section 4) which shows that the impact of performance-based pay scheme differs according to the general wage levels of teachers in the countries surveyed.

1.6. The quality of the social dialogue with trade unions as a factor of attractiveness (volume 2, chapter 3)

The quality of the social dialogue is important for the success of planned reforms, human resource management that is both fair and efficient, the improvement of the education system, the well-being of teachers and the profession's image in society. This, however, requires the readiness of all stakeholders to cooperate and a shared sense of transparency. In this respect, once again Finland and Ireland provide examples of good practice.

1.7. Initial teacher education and recruitment modes (volume 2, chapter 4)

1.7.1. The preference for a 'concurrent model' of initial teacher education

Initial teacher education (ITE) is the first time students discover their future profession, its challenges and difficulties. Quite naturally, it is also one of the main elements that shape future teachers' appreciation of the profession's attractiveness. ITE is dispensed through different systems in Europe: 18 countries use a system based on a three or four year bachelor's curriculum; 10 others require a four-to-five year master's curriculum (for instance Finland, France, Iceland, Portugal and Spain), or—depending on the ISCED level—one diploma or the other (4 countries).

ITE is perceived as more attractive if it allows for first-hand experience of the job at an early stage. Responding to the online survey, student teachers and teachers agree that ITE needs frequent practical sessions starting early in the curriculum. In Finland, Ireland and the United Kingdom, three countries where a positive image predominates (volume 2, chapter 6, section 1) requests are related to field and peer contact. Conversely, in the Slovak Republic, Poland, Greece or Spain, over 50% seem to favour the transfer of knowledge through lectures. The relative importance given to didactics and methodology is relatively significant for the importance given to a theoretical professional reflection: Hungary and the United Kingdom favour speedy training and therefore restrict this aspect, while Belgium, France and Spain exhibit strong expectations in this area.

Another request concerns more coordination between different types of teacher educators, particularly between university-base educators and mentors in schools. Also, in the interviews, was mentioned the need to strengthen links between ITE and research.

Part of the attractiveness is derived from the students' and—later on—teachers' research input. This is also proposed by recent studies: *"In short, the kind of education needed today requires teachers to be high level knowledge workers who constantly advance their own professional knowledge as well as that of their*

profession. Teachers need to be agents of innovation not least because innovation is critically important for generating new sources of growth through improved efficiency and productivity” (SCHLEICHER, 2012). This in turn requires more teamwork and networking (ZULJAN & VOGRIN, 2011).

These principles exist, at least in part, in various countries, and are more prominent for instance in France, Germany, Ireland, Sweden and the UK than in Greece and Poland. They clearly meet rather well the expectations of future teachers cited in the present study. The link between academic and professional knowledge and guided experience in schools, together with research feedback, is highly valued.

It was also suggested that professionals in charge of mentoring student teachers for shadowing sessions require some form of certification, and thus training, preferably academic. Professionals engaging in these kinds of activities could be entitled to a lighter workload or financial compensation. In Council Conclusions of November 2009, adopted during the Swedish presidency, Ministers agreed that teacher educators should have “*solid, practical teaching experience, good teaching competence and a high academic standard.*”(Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 26 November 2009 on the professional development of teachers and school leaders - OJ 2009/C 302/04).

The European Commission Peer Learning Conference held in Brussels on 27 & 28 March 2012 highlighted that teacher educators, whether they work in schools or in higher education, play key roles in every education system (European Commission, 2012, *Policy support for teacher educators.*)

1.7.2. Recruitment criteria and procedures: the need to better fit the new competences expected from future teachers (volume 2, chapter 4)

Recruitment is more than a technical procedure with a view to hiring teachers. If the profession is to become more attractive and to attract the best candidates, the recruitment stage needs to be considered as a progressive procedure closely linked to initial teacher education, the pre-recruitment stage and a sufficiently long probation period (leaving ample room for practical training and mentoring). It should be an extended process characterised by a series of stages that guarantee, within the framework of an accreditation system, the recognition of the general ability to teach (mastery of the subjects being taught, professional competence). The main challenge is to balance these often contradictory approaches.

A recruitment as much as possible based on a high degree of selectivity (master’s degree for the ISCED 1 - 3 levels)

We have seen that there is a trend in Europe towards a mandatory master’s degree or initial teacher education curriculum of more than four years. A high level of selectivity at the recruitment stage during the ITE period, combined with an attractive salary and a positive image of the teaching profession should make it possible to attract the best students. An American study (AUGUSTE, KUHN & MILER, 2010) shows that countries like Finland, Korea and Singapore, which manage to attract top-third students (with respect to their grades) to ISCED 3 studies, produce pupils who score better in international comparisons. Thus, it appears that the requirement of a professional master’s degree for teachers with ample time devoted to practical training would have

a positive impact on the image of the teaching profession. If shortages can only be solved by recruiting candidates who do not hold a master's degree, these candidates need in-service professional development and should be given the time to complete their education up to the master's degree. This could be done through facilitating access to courses (shorter working hours, customised provisions, Online Distance Learning).

A pre-recruitment and financial support for longer studies through specific scholarships

A longer curriculum may, however, pose a financial challenge for some students envisaging to become teachers. This trend may be the reason for the difficulties inherent in a longer curriculum and deter some good students. In most countries, and mainly for the secondary levels (ISCED 2 and 3), specific professional education is provided after the bachelor's degree, especially in countries that use a consecutive system. This poses two problems. Firstly, it risks excluding teachers from disadvantaged social groups who want to start working sooner, which may mean that the people who can provide role models for children from poorer backgrounds are not attracted to the profession. On the other hand, it does not attract the best students who tend to opt for more prestigious and better paid professions. A pre-recruitment system allows systems to address these two challenges.

There is a need for programming recruitment by means of clear anticipation and promotion policies

One of the reasons why a longer curriculum acts as a deterrent for many students is the uncertainty of finding a job afterwards. With a view to regulating the recruitment flow, each country could design forecasting and foresight procedures for the coming five to ten years: this would include demographic evolution, age structure of teachers, specific needs for the various disciplines, teaching levels and types, geographic distribution, need for specialised teachers, etc.

Base qualification and certification examinations for the teaching profession on three dimensions: academic, professional and personal

Recruitment procedures must make it possible to identify the solidity of academic knowledge for the subjects a person wants to teach, while also assessing specific professional competences, such as the ability to analyse a professional situation, to communicate, and to master professional ethics. Such competences can only be assessed by a team. Involving teachers in the recruitment procedure of future colleagues is often the first step towards integrating new colleagues onto the teaching staff. The criteria to be taken into account change to a certain extent in various contexts: recruitment for ITE courses, for a national list of licensed teachers or for a specific post in a specific school.

The issue of attracting professionals who might consider becoming teachers as a second career (validation of their experience)

Even though teacher education should be provided through specialised university curricula, it is important to leave access open to persons coming from different fields (diversification of profiles and careers). In addition, the attractiveness of the teaching profession can be controlled by a recruitment offer for clear-cut profiles that may

require specific qualifications and experience. This would entail a combination of a nationally recognised qualification with job-specific recruitment. This kind of recruitment gives more weight to schools and involves peers. This makes it possible to hire teachers for specific profiles (pupils with special needs, etc.) rather than just for a given education level (primary, secondary). Recruitment needs to become more focused, open, better targeted, and with a higher visibility on the job market. In this respect, some innovations implemented in the U.S. deserve some attention.

Alternative routes into the teaching profession in the United States

In 2009, 47 states and the District of Columbia had authorized programmes offering alternative routes for recent university graduates or mid-career professionals to enter the teaching profession. More than one third of new teachers in California, New Jersey and Texas enter the profession through alternative programs.

The New York City Teaching Fellows (NYCTF) programme, which is part of 'The New Teacher Project', also offers some preparatory training and student teaching opportunities for individuals working toward a master's degree in education. The programme is highly selective and has been successful in building the teacher workforce, as more than 1 in 4 mathematics teachers in New York City began their careers as Teaching Fellows.

Teach for America (TFA), which is among the best known of these programmes, recruits individuals to serve in hard-to-staff schools in rural and urban low-income areas. The programme, highly selective (in 2008 only 1 in 7 of the 25 000 applicants was accepted) has a strong reputation among graduates of ivy-league universities. In 2008, 11% of the Yale graduating class, 10% of the Harvard class and 9% of the Georgetown University class applied for the 2-year programme. Those who are accepted to the TFA "Corps" receive 5 weeks of intensive training and once they have started teaching, study part-time toward their teaching credentials. There is evidence that students of TFA teachers perform at least as well in mathematics as students with other beginning teachers. A study of different alternative teacher preparation programs in New York City found that by the second or third year of teaching, student gains were somewhat higher for middle (*i.e.* lower-secondary) school mathematics than with non-TFA teachers. However, TFA also has a high attrition rate. There also appears to be a great deal of variation in the structure and support for improvement as well as in evidence of effectiveness within and across these programmes.

http://naeducation.org/Teacher_Quality_White_Paper.pdf

The issue of teacher's legal status

Recruitment modes and criteria are strongly correlated with the status of the teachers in question. Civil servants with a permanent contract are recruited differently from fixed-term contract teachers. Our interviews have revealed that legal status is a crucial factor for the profession's attractiveness. This is corroborated by countries where the status of teachers has changed. In most instances, such changes were aimed at phasing out the civil service status to encourage a stronger professional

commitment among teachers. In several countries, like Austria (permanent contract after five years of service), Sweden, Romania (since the 2011 Act) and certain German Länder, like Berlin, teachers have lost their civil service status. The attractiveness of the teaching profession cannot be solved merely by restructuring initial teacher education and recruiting procedures. The legal status of teachers needs to be taken into account. For a majority of interviewees the teaching profession is less attractive in the absence of any guarantee regarding salary and job security.

1.8. Early career support is still widely considered substandard (volume 2, chapter 5)

Early career support (ECS) is mentioned in 80% of our interviews and creativity workshops. The documentary study demonstrates its crucial importance as a major variable for the quality of teaching. Negative experiences of new teachers with little or no support may explain early drop-outs. One interview question was about dropping out. Over a quarter of interviewees cited this as a likely reason, especially in countries where ECS is absent or has been scaled down for budget reasons (for instance in France and Greece). Decision-makers, policy-makers and school heads all mentioned the subject during our interviews. To the question about which aspects of their professional education were most helpful in preparing them for the teaching profession, student teachers in a majority of countries reply: 1) teaching practice without a mentor; 2) practicum with support by mentors or experienced teachers. Similarly teachers, mainly selected assistance by experienced peers or mentors for the preparation of their classes, and regular meetings with peers to discuss problems, solutions and educational resources. Induction is perceived indispensable for a sound education curriculum.

The findings of research into the professional development of teachers (SCHEERENS, 2010) lead to one essential conclusion: the teaching profession requires more than just academic knowledge instilled by a traditional university system; action-situated knowledge is equally important (SCHÖN, 1983; JORRO, 2002; BILLET, 2011). This action-situated knowledge can only be acquired in real life situations, through *hands-on training*. The cut in the number of pupils per class may also be beneficial for new teachers. This factor often ranks second or third in the responses to the online questionnaire and is mainly voiced by early career teachers.

Induction programmes are considered necessary, or at least very useful, for teachers of all ISCED levels

The identification of the induction period must be clear. Early career teachers, irrespective of their status, require guidance by the local system: school heads, inspectors, experienced peers, and mentors. The elements of an initiation programme must be clear and formalised. The induction period is not always linked to a specific support programme. Certain kinds of contracts specify no support programme (direct job entry, on-the-job training). Moreover, due to the lack of candidates and the ensuing speedy recruitment procedures, not all early career teachers have received sufficient initial career education: they may therefore be *certified* (i.e. holders of a specific diploma) but not really *qualified*. The probationary period is an essential part of the support measures for early-career teachers. This period is sanctioned by an evaluation to certify the acquisition of the required competences.

The support period needs to be long enough (at least one year, preferably during the first two or three years)

In some countries, recruitment—or certification in other countries—is only considered final after a trial period of three months up to one year. This period is often referred to as the probationary period. This is the case in Austria, the Flemish part of Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Slovak Republic (in some cases), the United Kingdom (except Northern Ireland), Sweden and Switzerland. In some extreme cases of consecutive systems, this is the only time when professional training is provided. The teachers involved are usually paid. The probationary period needs to be customised and based on a clear contract (see the case study of the Scottish system in volume 2, chapter 5)

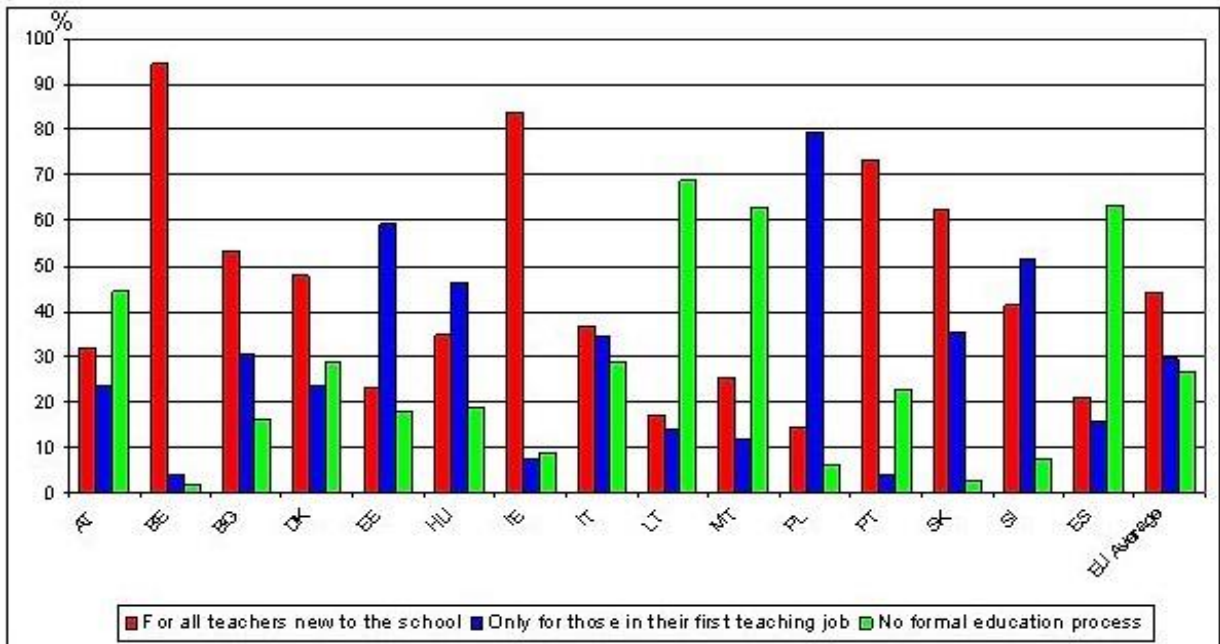
Fewer hours of teaching for early career teachers

Student teachers and teachers advocate reducing the hours of teaching of early career teachers to encourage them to take part in a support programme. This lighter workload allows them to benefit from coaching sessions going from lectures to group discussions and exchanging practical experiences. It allows new teachers to discuss with peers. The documentary study allows listing the variety of support conditions available to newly qualified teachers (EC-DGEC 2010, p. 12).

There are three groups of countries:

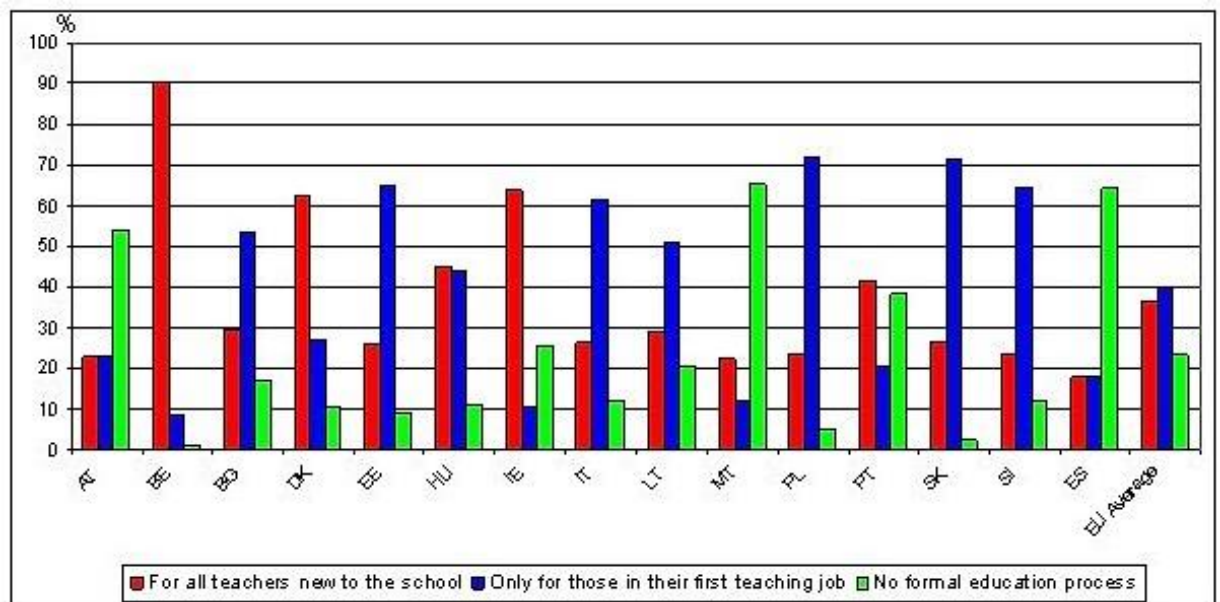
- Those providing several support measures: (1) regular meetings with peers, (2) assistance with the preparation of classes and assessments, (3) teacher shadowing, (4) meetings with supervisors, (5) visiting other schools and resource centres, (6) online resource sharing: BE(nl), EL, ES, FR, IT, RO, SK, UK-SCT, LI, TR; and to less extent EE, CY and LU.
- Countries that provide only some of these resources, i.e. items (1), (2) and (3), and exclude the obligation to continue training and visit other schools: BE(fr), DK, DE, EE, IE, PL, SI, IS and HR.
- A few countries with no particular support programmes: AT, BG, CZ, CY, HU, LT (only assistance with preparations).

Figure 3.1: Frequency of the existence of formal induction process in school



Source: ED-DGEC, 2010

Figure 3.2: Frequency of the existence of a mentoring program in school



Source: SCHEERENS (2010), *Teacher's professional development*, fig. 4.10, Frequency of mentoring and induction programmes (2007-08). Not all countries in our study are covered.

The documentary study and the interviews reveal that the supervisors involved in ECS have different statuses (tutors, advisors, university staff, school heads, mentors and inspectors). This status variety of supervisors is considered positive as each of these professionals plays a different and complementary part and therefore contributes to an

effective support. Many new teachers naturally turn to their more experienced colleagues for advice and suggestions. It is important that the panel of mentors includes teachers who can share their experience of real life work situations. They may have their own classes or act as backup for the classes of beginning teachers.

The advantage of education advisors who are not teachers attached to a given school is that they are not affected by the “this is how we do it” attitude, i.e. the unwillingness of the local education community to ‘think outside the box’. In addition, they are free to commute between academic education and the schools where new teachers work. “The existence of regular meetings with peers” ranks 1st, 2nd or 3rd in all countries as the most useful mode of support. The documentary study reveals the benefit of regular task forces consisting of trainee teachers, new and experienced teachers. This teamwork encourages the development of a learning community, which is more effective than one-on-one coaching.

Support through involvement in research activities: it also appears that the link with education departments at universities needs to be maintained at the induction stage. This ensures contact with research and the development of a reflective competence, a prerequisite for reflective practitioners in line with SCHÖN’s findings (1983). A key factor for the support programme’s efficiency is that all persons providing support for new teachers receive common training based on the initial education programme, because a good teacher is not necessarily a good mentor.

Studies on teacher education measures advise specific training and a formal certification procedure. Some countries use a specific examination for certifying experts, like France (instruction fitness certificate [CAFIPEMF] for primary level teachers) or Scotland (AST status: Advanced Skilled Teacher). It could therefore be advisable to provide closer ties between the three stages: ITE, ECS and CPD as it is already the case for instance in Ireland and Scotland.

The development of ICT is leading to the creation of a host of online resources for teachers. Although they are very popular among early career teachers, they receive little support or validation from supervisory authorities. What is missing is the encouragement, through specific provisions and a legal framework, to develop such resources and conduct research into how they are used. Certain countries (Ireland, UK) have already launched tools that allow teachers to access powerful platforms where they can find help with day-to-day problems. Other countries are only just starting to work on such new tools. In some countries, these resources are developed on behalf of the state education authorities.

Pending their validation by research, such initiatives could be generalised. This development is likely to boost the teaching profession’s attractiveness, because if these sites can be accessed by ITE students and candidates for the teaching profession, they will provide inside information about the profession, its difficulties and challenges.

1.9. In-service training and continuous professional development are still not developed enough in most European countries (volume 2, chapter 5)

An effective continuous professional development (CPD) policy can contribute to a positive image of an education system able to adapt to the profound changes in today's world. The challenge is to promote the image of a future-oriented education system in public opinion, among young people and in the media. Faced with the challenge of managing an increasingly diverse group of pupils, often from different cultural backgrounds, with a rising number of pupils who may also have specific education problems, teachers cannot be blamed for feeling increasingly dissatisfied with their profession. CPD is a key factor for encouraging job satisfaction and the attractiveness of the teaching profession.

Several persons we interviewed underlined the lack of coherence of the CPD programmes they attended, the lack of adjustments to the assessments of pupils in schools, and long response lags when faced with a problem. The urgent needs expressed by teachers are the same all over Europe: the authority issue, coming to grips with the heterogeneity of pupils, mastering new technologies, research into new ways of transferring knowledge to an audience with new expectations. Some recent surveys indicate that a growing number of teachers are considering leaving the profession, and that the only thing that keeps them from doing so is related to economic considerations. All research into professional development reveals that important changes are necessary for the most traditional forms of continuous training. Scattering, waste, no connection with local problems or specific school problems, no coherence with ITE or new urgent needs of teachers are terms that kept returning in the interviews we conducted. Seminars and conferences, and visiting other schools, are considered the least beneficial for their own activity. A new approach in close contact with schools is called for. It might be less expensive and more efficient. By encouraging a sense of responsibility and belonging to the school's professional community, it may root teachers in their profession and contribute to their professional development.

An expectation often expressed: take into account education efforts by teachers and their ability to innovate in meaningful and effective ways for career advancement and/or pay raises

While CPD is considered an inherent part of the profession, it is often too expensive. Only mandatory CPD is free of charge. The rest is at the teachers' own expense. As long as training leads neither to some form of certification nor to promotion, teachers are not really motivated to commit themselves. Participating in education research projects and acquiring qualifications gathered through additional training could entitle such teachers to a bonus for the development of their careers. Professional development could be taken into account for career assessment and pay raises. Institutional recognition of continuous training needs to be reinforced.

Another expectation: the support of CPD with research-action and sufficient time credits for long-term CPD wherever possible

Research-action needs to play an important part within strict conditions. Adjusting to local problems based on overall national or regional choices, duration, financial backing, valuation, and partnership are the words commonly heard. This change of practice requires the collaboration with research teams and teacher educators. Such research is expected to identify concrete answers, tools and strategies for clearly identified professional problems. Meaningful involvement in research-action takes time if it is to be reproducible, theoretically-founded and providing demonstrable solutions. Such approaches require regional, national and international coordination. They also require sufficient funding for research contracts, the availability of teachers, administrative recognition of teachers and school heads who encourage this kind of work, and academic recognition for the researchers.

Special training for school leaders is necessary to prepare them to facilitate CPD

The sense of belonging to a community of practice, and even more so to a community of trainees, is a crucial factor. Personal development is linked to the development of the team. Teachers need a sense of security and trust in front of pupils, parents, the school head (and the inspectors in some countries). This is a prerequisite for a sense of self-efficiency and collective effectiveness. School heads are among the key actors, because they need to be prepared to allocate more time to continuous training schemes. Their own careers should be linked to the ability of their schools to embrace innovation and to enhance the performance of their pupils. If CPD programmes are to be supervised by school heads, they must be prepared for this responsibility. It is the authorities' duty to design a dynamic CPD policy adapted to local situations and to provide the required logistics.

1.10. An overall insufficient support for teachers in difficulty (volume 2, chapter 5)

The documentary study pointed to four major causes of difficulty, which were verified by the online survey: deterioration of working conditions, difficulty to adapt to frequent changes of the education system, loss of autonomy and a poor image of teachers among the general public. These factors complicate teaching and may cause difficulties for certain teachers, such as personal problems, relationship conflicts or difficulties to adapt to certain kinds of pupils. These problems come at a human cost for the persons in question but also affect the schools' effectiveness. ETUCE surveys pointed out that the stress experienced by teachers is mainly linked to the organisation of their teaching activity. Only 13 European countries have devised measures (regulations or recommendations) for teachers facing personal difficulties. In 19 countries there is an aid package for teachers faced with conflicts. Teaching needs to be reinvented: it is time to promote new approaches. The traditional isolation of teachers in their classrooms needs to give way to teamwork, based on collective reflection and individual autonomy as well as on more autonomy for the schools.

Part of the answers is related to the education system, another part to purpose-specific education, and, finally, support provisions for diagnosing and providing

personal help. In addition, some answers are about amendments to the professional career. The instructors we interviewed made the following propositions for helping teachers in need: mentoring by a more experienced teacher (34.1%), additional training (26.2%), shorter working hours (19.5%), assistance with professional development (14.8%) and other provisions (5.1%). Our interviewees believe that teachers need to be better prepared for increasingly complex teaching conditions. They prefer an approach that helps them develop their reflective skills and tools to analyse their activity rather than training through transmission (“turn-key solutions”). Some of them also wish to develop exchange opportunities among teachers to spread “good practice” ideas.

The variety of the solutions suggested in different countries to combat difficulties is striking:

- In some countries (Croatia, Greece, Poland), the problem is tackled with reference to pupils and their attainment. In this respect, the interviewees refer to the “teacher effect” and “good teachers”.
- In other countries (Finland, France, Ireland, Italy, Norway, Scotland and Sweden), CPD is considered the most effective cure for the teaching malaise.
- More autonomy and more responsibilities for teachers and schools are requested in countries like Austria, Cyprus and Germany.
- In other countries (Hungary, Romania), the issue of helping teachers facing difficulties is not even mentioned by interviewees. There are other pressing issues, especially higher pay (salaries are considered far too low), job security in these dire times, etc.

According to the replies gathered during our interviews with decision-makers of the education system, CPD is perceived as the best tool for solving the difficulties of teachers.

1.11. Prestige of the profession and social status of teachers (volume 2, chapter 6)

The study of representations is based on national expert reports, country files and minutes of interviews with education officials and media representatives as well as various bibliographic sources. In a majority of European countries, the representations of the teaching profession are ambivalent. Depending on where the actors stand, the same elements are either viewed positively or negatively. The closer an actor is to the school situation (parents of pupils, for instance, or the regional press covering specific situations), the more sympathetic their attitude becomes. Persons with a negative impression are usually rather remote (national press, public opinion) or the teachers themselves. These representations have a strong impact on the profession’s attractiveness as well as on professional practice: a teacher who feels disrespected or does not regard his/her profession very highly quickly loses motivation, shows little commitment and has no desire to develop one’s competences.

Fictional TV or movie productions are a useful indicator of how teachers are viewed in the various European countries. Looking at four countries (France, Germany, Italy and UK) it can be noticed that the difficulties inherent to the profession, on a social and

symbolic level, are rising. Teachers are depicted as isolated individuals in a society in crisis and usually a controversial political and social context. Such teachers seem to put up with their problems without taking relevant decisions. This trend has been on the rise over the last five years or so. Earlier productions seemed to focus more often on reminiscing about the good old days when teachers still had a genuine social role and were able to influence their environment.

The tabloid press hardly ever investigates the profession or the education system. It usually only mentions negative aspects, such as laziness, a lack of commitment, excessive job security, etc. Trivial incidents, such as crisis situations where teachers have to face pupils and their parents, are covered extensively and in highly visual spots.

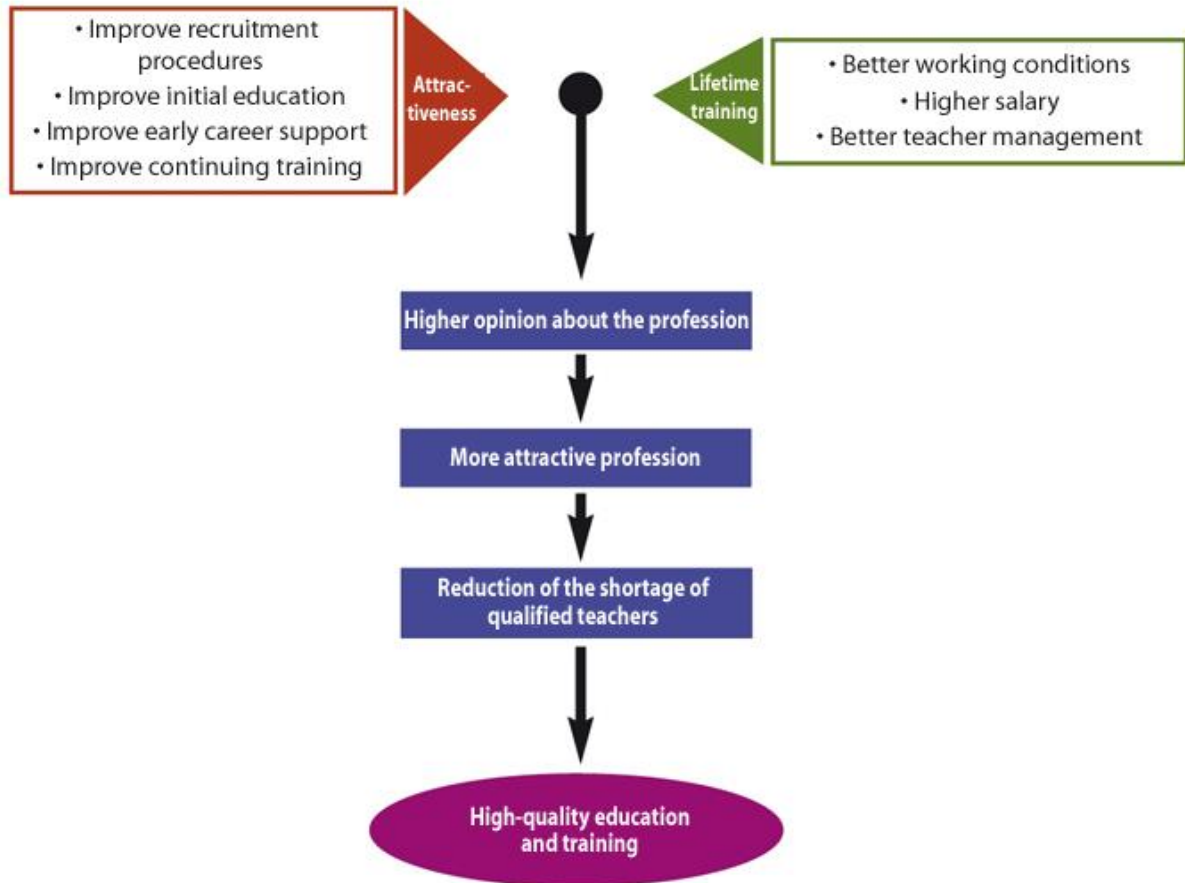
This way of talking about the profession induces a sense of decay and an identity crisis among teachers. This happens to a greater or smaller extent in nearly all countries, even those where pupils' attainments or salary conditions are good (exceptions are Finland and Ireland). There are, however, national variants: in some countries, the sense of deterioration has no effect on the profession's popularity and recognition (Cyprus, Greece). In southern and eastern European countries, the lack of institutional recognition is deplored, while northern and western European countries worry about the teachers' workload (see chapter 6).

The documentation study and our interviews have allowed us to identify some possibilities for improving the teaching profession's image. One interviewee in Finland voiced the idea of a virtuous circle: a strong tradition of respect for the profession, a proven quality of teachers, who are highly educated (master's degree since more than 10 years), effective autonomy regarding field research and innovation, and genuine responsibility for the teaching quality level necessarily lead to a better image.

Isolated measures for valuing the profession are through awards or national teachers' days in some countries, or by means of advertising campaigns emphasising the profession's merits need to give way to a systemic approach, as is already being done by Ireland and Norway ('GNIST' programme).

Figure 3.3

Systemic representation of the teaching profession's attractiveness



2. Recommendations

The present recommendations focus on measures likely to make the teaching profession more attractive at the European level. They are all based on the identification and analysis of elements that contribute to the teaching profession's attractiveness across European countries. The recommendations presented below therefore rely on document review and an up-to-date survey of the opinions of six categories of actors in 34 European countries or education systems. The table below summarises our recommendations, which are based on the arguments and findings presented and discussed in the previous chapters.

The recommendations are in line with the principle that *"The Member States are responsible for the organisation and contents of the European education and training systems, whereas the European Union's role is to support them"* (Communication from the Commission to the Council and the European Parliament, SEC, 2007).

The recommendations are based on the principles of coherence, efficiency and sustainability of the measures to be taken to attract and retain the best candidates to the teaching profession. Teacher recruitment, initial teacher education, early career support and continuing professional development constitute a *cluster*, the coherence of which is based on the consideration that initial teacher education needs to be followed by *lifetime learning* for a highly specialised profession faced with social expectations and challenges that are hard to anticipate or predict today. This explains the complementarity of all recommendations. Though listed separately, they need to be viewed in their broader context. Thus, recommendations regarding initial teacher education (ITE), early-career support and continuous professional development (CPD) will only be effective if they are considered as essential elements of a continuum of teacher education and professional development.

Other recommendations, such as those related to working conditions, career advancement or professional evolution combine to make the teaching profession more attractive and thus help to avoid future shortage of qualified teachers. Finally, these recommendations are based on the principle of sustainability and invite the various governments to adapt their own education policies to acknowledge the growing importance of education and the ensuing need for high quality education and training in Europe. *"Good teachers are the profession's most attractive assets."* (Remark made by a head official of the Spanish education system during an interview).

The main recommendations will be presented first by explaining their possible contribution to the improvement of the attractiveness of the teaching profession. Then, they will be summarised in table 3.2 presenting initiatives at two levels: the national or regional level, and the European level. The recommendations for the European Commission are intended to suggest actions based on the following considerations:

- spreading good practice and information likely to help the European countries to improve the teaching profession's attractiveness,
- encouraging debates about the teaching profession at the European level,
- promoting the teaching profession and the social role of European teachers,

- encouraging future studies to improve the awareness of the teaching profession and all the country-specific aspects it encompasses on a European scale.

The recommendations for decision-makers in the education field need to be seen in the context of:

- The centralised or decentralised nature of the respective education systems and the ways in which teaching careers are managed.
- The diversity of current recruitment systems, initial teacher education and CPD programmes, as well as early career support schemes.
- The labour market in countries where teachers are not civil servants (or where only some can hope to become civil servants).

2.1. Improve teacher recruitment methods (see section 1.7 above)

The objective is to recruit good students with competences and attitudes well adapted to the new roles and responsibilities of teachers. A better mode of recruitment should increase the quality of future teachers and thus enhance the image of the profession in society. From this perspective, the recruitment of teachers at a Master's level can be considered as a positive factor (e.g. Finland). But it is also necessary to take into account the diversity of teaching situations and competences others than academic knowledge and the diversity of teaching situations. The documentation study, the online survey and the interviews and workshops reach the same conclusions: the fact to recruit qualified teachers well adapted to the new professional profiles which are required and able to cope with a fast-changing context is an important factor for enhancing the prestige of teachers and thus the attractiveness of the profession (see volume 2, chapter 4, section 2).

The design and implementation of forecasting and foresight procedures is another important initiative to improve estimates of the future needs of recruitment and thus to reduce risks of shortage and the uncertainty about the opportunities for student teachers to be actually employed (volume 2, chapter 4, section 2).

Scholarships and/or pre-recruitment mechanisms should be adopted to reduce the risk that good students from disadvantaged social backgrounds will be deterred by the cost of studies related to Master's level education studies (chapter 4, section 2, volume 2).

In order to diversify the teacher workforce and meet needs for teachers in some science and technology subjects, countries should adopt procedures to facilitate the recruitment of professionals envisaging teaching as a second career (volume 2, chapter 5, section 4)

2.2. Improve initial teacher education (ITE) (see sections 1.4 and 1.7 above)

The increasing success of the concurrent model is considered already as a very positive evolution. Several countries (England, Finland, Ireland and Scotland) have already managed to improve co-operation between teacher educators and in-school mentors, as well as the synergy between academic courses and teaching practice sessions. ITE programmes which allow for better preparation of student teachers for their future jobs should be developed and generalised throughout Europe. The link

between the quality of ITE and the quality of teaching has been observed in many studies, as well as the relationship between the quality of teachers and the image of the profession in society. Among priorities for improving ITE: teamwork, ICT, pupil assessment (mainly formative assessment), and the teaching of key competences (see volume 2, chapter 4, section 1).

2.3. Develop early career support of teachers (induction) (see section 1.8 above)

Given recent trends of increasing attrition of young teachers, the development of induction programmes are increasingly crucial. Effective early support of beginning teachers is considered as an important factor to enhance the attractiveness of the teaching profession. Various examples of good practice can be found in Cyprus, Estonia, Ireland, the Netherlands, Norway and Scotland. An important aspect is to improve the co-operation between the staff of the departments of education of universities, mentors (i.e. experienced teachers) in schools, school leaders and inspectors (where they exist) and develop a common culture and language among teacher educators (see chapter 5, section 1, volume 2).

2.4. Develop and improve continuous professional development (CPD) (see section 1.9 above)

Given the fast-changing society and the new challenges that schools and teachers must face, CPD is increasingly a must. We have analysed the new roles and responsibilities expected of teachers and the fact that everybody sees education as being increasingly vital. New expectations from schools require teachers have an effective CPD throughout their career. But the recent context of economic recession has led many European countries to reduce, rather than increase, CPD programmes. Admittedly, some priorities should be formulated, particularly in order to implement the new curricula and teach the key competences proposed in 2006 at the European level. The documents designed in Ireland and in Scotland in the perspective of a continuum of teacher education from CPD to induction and then CPD are examples of good practice. The quality of this continuum and the new professionalism of teachers in these two countries contribute to a large extent to the good image of the profession in those countries (see volume 2, chapter 5, section 2).

2.5. Develop and improve support for teachers in difficulty (see section 1.10 above)

Many studies and reports have analysed the increasing 'malaise' of teachers and the increasing incidence of burnout. Yet in many countries there is no specific mechanism to help these teachers or even to help them to find another job. The growing incidence of teachers in difficulty is certainly affecting the image of the whole profession. Beyond the need to address this issue, effective support would increase the attractiveness of the profession (see volume 2, chapter 5, section 3).

2.6. Develop professional and geographical (European) mobility of teachers (see volume 2, chapter 5, sections 4 and 5)

This factor increases attractiveness mainly among students, student teachers and young teachers (see online survey results and chapter 5, section 5, volume 2). The possibility for teachers to have access to other responsibilities either within the education system or in other professional sectors is considered by a majority of student teachers and teachers as an element likely to increase the attractiveness of the teaching profession. It is the same for geographical mobility, mainly within Europe.

2.7. Improve methods for appraisal of teacher performance (see sections 1.5 and 1.9 above)

Teachers and teacher unions expect clear and transparent criteria to underpin their performance assessment, mainly if such an evaluation can have an impact on career advancement. The impact of such an evaluation on the attractiveness of the teaching profession is rather positive: it can improve the image of the profession in society and is also appreciated by the best teachers as well as by the best students who are not against the idea of rewarding competent teachers (see volume 2, chapter 3, section 4).

2.8. In some countries make salaries more attractive (see section 1.2 above)

Even though the choice to become a teacher remains often a 'vocation', the salary levels in some European countries are not competitive with respect to those of other professions requiring the same level of education. The results of our online survey, interviews and workshops have confirmed the importance of sufficient salaries to attract and retain good candidates (importance underlined in the literature and previous international reports). Salaries should also take into account the specific difficulties in certain geographical areas (for further analysis see volume 2, chapter 3, section 1).

2.9. Improve working conditions (see section 1.3 above)

The pupil/teacher ratio is considered in many countries as a factor making the teaching profession difficult (online survey, interviews and workshops, as well as literature). This issue should be addressed by taking into account the specific difficulties of certain schools in disadvantaged areas. Another aspect often mentioned is related to the insufficient material working conditions (for further analysis see volume 2, chapter 3, section 2).

2.10. Improve the profession's image in society (see section 1.11 above)

We have seen that the degradation of the prestige of the teaching profession is perceived in all European countries (except Finland and Ireland) and that it is one of the main reasons that teachers mention for envisaging to change for another job (chapter 2 on online survey results).

A few examples of good practice have been provided by countries that have designed systemic long-term strategies: Estonia, Ireland, Lithuania, Norway and Scotland (see volume 2, chapter 6, for analysis).

Table 3.2 Recommended policy measures to enhance teaching profession’s attractiveness

Themes	European level	National or regional level
<p>1. Improve recruitment methods (<i>section 1.7 above</i>)</p>	<ul style="list-style-type: none"> ✓ Exchange good practice regarding recruitment criteria that link competences other than academic knowledge to the consideration of the changing roles of teachers ✓ Build foresight capacity to anticipate future challenges and their possible impact on the teachers’ roles and on suitable competences profiles 	<ul style="list-style-type: none"> ✓ Recruit at the highest tertiary education level possible ✓ Develop pre-recruitment programmes ✓ Take into account the diversity of teaching situations that may require specific qualities ✓ Make entry into the teaching profession easier for professionals from other fields who consider becoming teachers (partial valuation of their experience and seniority)
<p>2. Improve initial teacher education (<i>sections 1. 4 and 1.7 above</i>)</p>	<ul style="list-style-type: none"> ✓ Create a permanent network for the exchange of ideas among the heads of ITE institutions and organise regular seminars and conferences in order to increase effectiveness of ITE ✓ Spread good practice regarding ITE, mainly via social networks and online forums 	<ul style="list-style-type: none"> ✓ Converge towards a university and/or professional master’s degree (5 years of higher education) based on research (increased prestige of the profession) ✓ Evolve towards a concurrent and progressive ITE model in order to better meet the real needs of future teachers ✓ Increase the share of practicum ✓ Create a better synergy of academic education and teaching practice ✓ Better define the tasks and roles of teachers for an evolving profession ✓ Develop teamwork and relevant use of ICTs ✓ Professionalise all persons involved in teacher education and training

Themes	European level	National or regional level
<p>3. Improve induction programmes and early-career support (<i>section 1.8 above</i>)</p>	<ul style="list-style-type: none"> ✓ Develop exchange of innovations and good practice 	<ul style="list-style-type: none"> ✓ Make comprehensive induction programmes mandatory for all teachers at all ISCED levels (at least one year) ✓ Put in place mechanisms for rapid detection of difficulties new teachers have to face and propose solutions ✓ Reduce the number of working hours at the induction stage (release time) to facilitate participation of new teachers in induction programmes ✓ Provide specific training for all supportive actors to enable them to provide effective support and increase synergy among all teacher educators ✓ Encourage teamwork to break the isolation of teachers ✓ Train school heads to manage, support and motivate new teachers
<p>4. Improve the quality of support available to teachers facing difficulties (<i>section 2.5 above</i>)</p>	<ul style="list-style-type: none"> ✓ Assess the impact of institutional provisions for teachers facing difficulties and facilitate exchange of good practices 	<ul style="list-style-type: none"> ✓ Develop support structures for teachers facing difficulties by qualified personnel ✓ Train school heads to coach teachers facing difficulties

Themes	European level	National or regional level
<p>5. Improve continuing professional development (CPD) and establish a continuum from ITE to early career support and in-service training</p> <p><i>(section 1.9 above)</i></p>	<ul style="list-style-type: none"> ✓ Spread good practice based on research with teachers ✓ Define recommended European standards ✓ Support grass-roots initiatives of European associations and networks 	<ul style="list-style-type: none"> ✓ Make CPD compulsory (free of charge and remunerated) ✓ Take into account any professional development activity by teachers in meaningful ways for career advancement and/or pay raises ✓ Encourage sabbaticals for CPD ✓ Through professional development, raise the awareness of school heads of the necessity of encouraging all teachers to engage in CPD ✓ Improve conditions for CPD (planning of training opportunities, infrastructure, and documentation) and the supply of continuing training in line with teachers' needs
<p>6. Improve geographical and professional mobility of teachers.</p> <p><i>(volume 2, chapter 5, section 4 and 5)</i></p>	<ul style="list-style-type: none"> ✓ Encourage the exchange of reliable data about the working conditions of teachers ✓ Set aside a proportion of Erasmus scholarships for student teachers ✓ Develop long-term teacher mobility programmes (1 school-year) ✓ Study the transferability of teacher competences to other occupations ✓ Disseminate competence references for European teachers and professional frames of reference ✓ Develop exchanges of good practice in this domain 	<ul style="list-style-type: none"> ✓ At the ITE or CPD stage, prepare the ground for teachers to undertake a teaching, training or study period in another European country every ten years ✓ At the initial education stage, raise the awareness of future teachers regarding mobility and comparative analyses of education systems ✓ Reward school heads who encourage a climate of international openness and teachers who take advantage of mobility schemes ✓ Make provisions for personal inter-professional retraining assistance (e.g. website and face-to-face sessions) ✓ Diversify the selection criteria to enable candidates from other fields to enter the teaching profession ✓ Financial backing for career changes if and when they are necessary or desirable

Themes	European level	National or regional level
<p>7. Improve the evaluation of teacher performance (sections 1.5 and 1.9 above)</p>	<ul style="list-style-type: none"> ✓ Exchange good practice on relevant criteria for the assessment of teachers ✓ Spread professional frames of reference for contextualised competences 	<ul style="list-style-type: none"> ✓ Regularly assess and give feedback to all teachers based on transparent criteria ✓ Develop incentives and link career advancement to teachers' effectiveness and commitment to improve ✓ Develop institutional recognition for mobility, CPD and innovation endeavours by teachers
<p>8. Improve the conditions for career advancement and in some countries make salaries more attractive (section 1.2 above)</p>	<ul style="list-style-type: none"> ✓ Encourage reflection about career advancement criteria for teachers 	<ul style="list-style-type: none"> ✓ Remunerate student teachers through a pre-salary in exchange of a commitment to teach for at least 8 to 10 years ✓ Raise the salary of new teachers in some countries to make the profession more attractive for bright and motivated students ✓ Encourage swifter salary progression for effective teachers ✓ Take into account the difficulties of certain environments (priority education zones, challenging schools), by means of financial incentives or through swifter career moves ✓ Design career advancement systems that contribute to retaining good teachers ✓ Develop a social dialogue about these issues

Themes	European level	National or regional level
<p>9. Improve working conditions <i>(section 1.3 above)</i></p>	<ul style="list-style-type: none"> ✓ Undertake comparative studies on day-to-day working conditions ✓ Facilitate exchanges of good policy practice in dealing with challenges such as violence within schools 	<ul style="list-style-type: none"> ✓ Improve IT and multimedia equipment, where they are substandard, and conditions of their maintenance, as relevant use of ICT can improve the image of teachers' professionalism in society ✓ Improve the pupil-teacher ratio, by taking the specific difficulties and levels of pupils into account ✓ Provide teachers with adequate infrastructure (meeting rooms, offices)
<p>10. Improve the profession's image in society <i>(section 1.11 above)</i></p>	<ul style="list-style-type: none"> ✓ Every 5 or 10 years, organise a European survey on the teaching profession (common online questionnaire) 	<ul style="list-style-type: none"> ✓ Include the professional identity issues in the initial teacher education programme ✓ Develop authentic internal and external communication, as well as public debate, about education issues ✓ Communicate about relevant innovations ✓ Train education decision-makers to engage in constructive relationships with the media ✓ Emphasise the value of teachers by stressing their professionalism ✓ Organise regular opinions / expectations polls (based upon reliable samples) of various stakeholders about the teaching profession