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Education and Training 2010:
Three studies to support School Policy Development

Lot 2: Teacher Education Curricula in the EU

FINAL REPORT

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EXECUTIVE SUMMARY

Background

'The Teacher Education Curricula in the EU' project is based on the work of the European Commission in the framework of the Education and Training 2010 work programme, in particular in the area of School policy. In Lisbon in 2000 the European Council set the Union the major strategic goal of becoming in 2010 the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. The work programme emphasised that teachers and trainers are central to the Lisbon agenda and highlighted key areas of work: identifying the skills that teachers and trainers should have; providing the conditions to support them adequately, including initial and continuing professional development; and addressing recruitment issues to do with attractiveness and flexible routes into the profession for people changing careers. The quality of Teacher Education (TE) is regarded as one key factor in determining whether the European Union can increase its competitiveness in the increasingly globalised word.

The concern about TE in Europe is raised also by studies that have revealed several shortcomings in TE. These findings accordingly prompted the EC to adopt the Commission Communication 'Improving the Quality of TE', which led to the related Council Conclusions[1].

This final report is based on the results of the research project 'Teacher Education Curricula in the EU', financed by the EC and carried out by the Finnish Institute of Educational Research (FIER), University of Jyväskylä. The main focus of the project was on the teachers' skills and competences referred to in the EU documents mentioned.

The study was expected to provide a survey of the situation regarding TE curricula across the 27 EU countries, including teachers in all levels of general education, but excluding those in vocational education and training. It should relate to curricula for initial TE, induction, and in-service TE.

Methodological approaches

In this research project a variety of data collection methods were utilized. Different sources of information essentially improved the reliability, depth and usefulness of the collected data. The data was collected in 2008–2009 and includes:

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[1] The Commission Communication 'Improving the Quality of TE (Brussels, 3rd Aug. 2007) (http://ec.europa.eu/education/com392_en.pdf)
The related Council Conclusions (Brussels, 26th Oct. 2007) (http://register.consilium.europa.eu/pdf/en/07/st14/st14413.en07.pdf)

1) *The document data* (Annex 3a-3d). TE curricula and other TE documents gathered by over 100 contact persons of the network and from, for example, the EURYDICE and OECD databases. The data represented the official publications concerning legislation, regulations, etc., as well as database information. When creating a new network for the purpose of this study (Table 3), very efficient use was made of existing TE networks involving different kinds of organizations as well as of FIER's own connections.
2) *The response from the network experts* provided more recent, current information which often went beyond the documented data.
3) *The questionnaire data collection* proved in many ways to be relevant in answering to the research questions and to validating the results obtained from other data.
4) *The interview data* consists of 38 interviews from Catalonia, Estonia, Finland, France, Italy, Romania and Scotland (Table 5). The interviews were carried out with a semi-structured interview method for the sake of consistency and reliability. The interviews efficiently provided more qualitative data about the selected Member States. The descriptions of the interviews (Annex 8) concerning each Member State were checked with the interviewees for verification and validation.

To be able to gain a common understanding of the skills and competences mentioned in the EU documents, the competences were clustered into eight groups: subject competences, pedagogical competences, integrating theory and practice, co-operation and collaboration, quality assurance, mobility, leadership and continuing and lifelong learning These groups should also be as extensive as possible and at the same time sufficiently understood in the same way in different countries. To increase the reliability and validity of the study and to obtain a common understanding of skills and key competences in TE curricula and other TE documents, the clusters were described by means of certain main skills and competences (Table 4).

Definition of competences required to work as a teacher

There is very much variation between countries concerning how and to what extent, if at all, the skills and key competences for the teaching profession are mentioned in TE curricula and in other TE documents. However, the study revealed that many of the skills and competences mentioned in the Commission's documents concerning the quality of TE have been included in most Member States' TE curricula or other TE documents in one way or another, but there is a large variation in the concepts used and in the extent they are used.

Many of the skills and key competences referred to in EU texts are quite general, such as subject or pedagogical competences or integrating theory and practice, which must necessarily be included in TE. The competences that are least commonly dealt with in national documents are those included in this study's categories of quality assurance, mobility and leadership.

Different phases of TE, initial TE, induction and in-service TE are treated very differently in TE documents. For example, in-service TE was hardly mentioned at all in the documents and only in a few TE documents were there skills and

competences highlighted which should be taken into consideration when planning contents, methods, etc. for teachers' in-service education.

Concerning the level at which key decisions are taken about the competences required to be employed as a teacher, three basic models exist (Table 6):

1. The competence requirements are set in detail at national level (or, in federal states, at regional level) i.e. by a ministry or other government body;
    this is the case in 5 countries, i.e.: Cyprus, Estonia, Germany, Slovenia, UK.

2. The competence requirements are set in outline at national level (or, in federal states, at regional level) e.g. by a ministry or other government body, but are adapted or further defined at a lower level, e.g. by a Teacher Education Institution;
    this is the case in 18 countries; i.e.: Austria, Belgium, Bulgaria, Denmark, France, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden.

3. The competence requirements are set at a lower level, e.g. by a Teacher Education Institution;
    this is the case in 4 countries; i.e.: Czech Republic, Finland, Greece, Malta.

Those countries where national teaching bodies, under ministries or governments, (e.g., Teaching Councils) that develop, accredit and evaluate TE programmes, or that control entry to the teaching profession, tend to have more explicit and more detailed descriptions of the competences that teachers are required to possess. This is the case, for example, in these six countries: Estonia, Czech Republic, Germany, Ireland, Slovenia, U.K. In those countries where the responsibility for TE curricula and their implementation is in separate TE institutions with more freedom in their planning and implementation, the definition of competences is more diverse.

The extent to which the competences are referred to in the EU texts and also in national (governmental) documents varies quite lot between countries. Subject competences, pedagogic competences and integrating theory and practice are mentioned in the documents of all countries. Competence groups as quality assurance, mobility, leadership, continuing and lifelong learning as teachers' competences are less common both in primary and secondary TE curricula.

It should also be noted that there are differences between primary and secondary TE in the importance attached to subject competences, pedagogic competences, integrating theory and practice, co-operation and collaboration and quality assurance. For example, pedagogic competences were seen as more important in primary TE than in secondary TE.

Generally, mostly subject competences, pedagogic competences, competences concerning integrating theory and practice and quality assurance were mainly determined at national level; others were taken into consideration at university or TE institution level, if at all.

Definition of TE curricula

In principle, the initial TE curricula have been defined both at national and at institutional level, or only at institutional level. There was no country where the TE curricula are defined only in a centralised way at national level. In federal countries (e.g. Austria, Germany, Spain and UK) the states usually have their own TE jurisdiction, although the frameworks are determined at national level.

Thus, concerning the level of decision-making at which key decisions are made about the content of initial TE curricula (whether described as topics to be covered, or as learning outcomes), two basic models exist (Table 7):

1) In 24 countries the national documents, laws and regulations provide general guidelines and frameworks on how TE has to be organised in TE institutions, with the institutions designing their TE curricula quite independently.

2) Only in three countries, in Greece, Luxembourg and Malta, are the TE institutions quite independent and define the structure and the contents of ITE curricula autonomously.

No reliable outline concerning decisions about the content of curricula for induction and in-service TE in different countries has emerged. This is due to the general European situation of organising induction as well as in-service TE. They seem to be arranged very heterogeneously and it is not obvious how the curricula for these phases have been determined and what the contents of the courses are, or even what the teachers' educational needs are in these phases in different countries.

Organisation of Teacher Education

Ultimately, in every Member State the government regulates, in one way or another, what kind of role TE has inside the higher educational policy making in the country. Consequently there are different ways of arranging TE in the country. Almost all countries mention TE in the legislation (e.g. definitions of academic degrees, applying the Bologna Process to the degrees) or provide the frameworks or main rules for organising TE in TE institutions, either totally or to some extent. There was no evidence of any Member States where neither the government nor a government agency gives any guidelines about how TE should be managed. Although it is laid down that TE curricula are to be constructed in autonomous TE institutions, the organisation of TE seems to be more complicated. It appears that also in cases where there is quite a high level of institutional autonomy some guidelines come from the upper level, if not from national level, then most probably from university level.

Conclusion

'The Common European Principles for Teacher Competences' (2005) and the Commission's Communication *'Improving the quality of TE'* (2007) have served as backgrounds to the study. They have identified the quality of teaching and Teacher Education as a key factor in securing the quality of education and improving the educational attainment of young people. According to the results of the study, the current situation concerning these two TE documents can be assessed as follows:

Both papers emphasise the professionalism of teachers as the profession should be attractive for young people. A well-qualified teacher profession with diversified knowledge, skills and competences has been stressed. Pedagogical and subject competences have been traditionally stressed in TE, also the importance of the relationship between theory and practice has been noticed widely. On the other hand, some skills and competences which have been more current during recent years have not yet been sufficiently taken into consideration when developing TE. For example, teaching heterogeneous classes as well as more effective understanding of pupils and students from different cultural backgrounds should be taken more seriously in TE curricula.

Both papers consider it important that the teacher profession should be closely tied to the surrounding society and the actors there. This is why co-operation and collaboration skills as well as improving communication skills will be even more significant in the future than they have been until now. According to the results of this study, such issues have not been given the consideration they deserve in TE documents.

Both papers emphasise lifelong learning principles and personal development in the teaching profession. These issues must have more attention in the future. To promote the idea of continuum in the teaching profession, there must be an assumption that the induction phase for a newly qualified teacher has to be developed and supported more effectively than so far, and that more attention should be paid to teachers' in-service education than nowadays. Even now teachers' in-service education has not been developed properly in many Member States and even in those countries where it is obligatory for teachers, the amount is insufficient and skills and competences which should be included in in-service TE have not been examined comprehensively.

Summing up the current situation in improving the quality of TE in the European context, it can be stated that the discussion the European Commission has raised among the Member States has been very valuable in stimulating the development of TE in the EU. This can be seen in the concrete moves made by Member States in developing their TE policy, and, in more practical terms, in considering what kind of skills and competences future teachers need during their whole career. In this work considerable importance is attached to the recommendations given by the EC.

Recommendations and suggestions for further research projects

Recommendations for TE policy making

- Raise discussion concerning effective TE regulation policies
- Raise discussion concerning teachers' skills and key competences to gain a common understanding of them
- Create a platform for effective sharing
- Share the best TE practices
- Emphasise and support the role of key experts in developing TE
- Emphasise and support the role of teachers and other TE actors in developing TE

- Emphasise and support teachers', teacher trainers' and teacher students' mobility
- Increase the status and the role of TE in HE policy making
- Support research based education in TE
- Support interaction between theory and practice in TE
- Ensure resources for all three cycles in TE
- Improve the attractiveness of the teaching profession
- Improve the opportunities for teachers' recruitment
- Create a continuum for teachers' professional development
- Support teachers' life-long learning, e.g., by supporting schools and teachers' personal development plans
- Take account of competences concerning teaching adult and mature students in TE

Suggestions for further research projects

- Using the network of TE experts created in the project as well as teachers and other actors in future development projects to advance a solid research base for the improvement of TE
- Projects concerning the effectiveness of TE
- Projects concerning the efficiency of TE
- Projects concerning relevant skills and key competences of the modern teaching profession and emphasising them in initial TE, induction phase and in-service TE
- Research concerning the quality of TE
- Teachers' needs analyses concerning their skills and competences during the whole continuum

Key words: teacher education, skills, competences, higher education, educational policy

ZUSAMMENFASSUNG

Hintergrund

Das Projekt 'Lehrpläne im Rahmen der Lehrerausbildung in der EU' beruht auf der Arbeit der Europäischen Kommission im Rahmen des Arbeitsprogramms "Allgemeine und berufliche Bildung 2010", besonders im Bereich Schulbildungspolitik. In Lissabon im Jahr 2000 setzte der Rat der Europäischen Union ein großes strategisches Ziel für die Union: Sie soll bis 2010 die wettbewerbsfähigste und dynamischste wissensbasierte Wirtschaft der Welt werden, die zu nachhaltiger wirtschaftlicher Entwicklung mit mehr und besseren Arbeitsplätzen und einem größeren sozialen Zusammenhalt fähig ist. Das Arbeitsprogramm hat betont, dass Lehrer/innen und Ausbilder/innen im Mittelpunkt der Lissabon-Agenda stehen und die folgenden Schlüsselbereiche für die Arbeit hervorgehoben: die Identifizierung der Fähigkeiten, über die Lehrer/innen verfügen müssen; das Schaffen von solchen Bedingungen, die sie angemessen unterstützen, Erstausbildung und berufsbegleitende Fortbildung inbegriffen; und die Behandlung von Rekrutierungsaspekten – z.B. die Attraktivität des Lehrerberufs und die flexiblen Routen des Berufswechslers zum Lehrerberuf. Die Qualität der Lehrerausbildung (LA) wird als ein entscheidender Faktor betrachtet, wenn die EU ihre Wettbewerbsfähigkeit in der zunehmend globalisierten Welt zu erhöhen versucht.

Lehrerausbildung wird in Europa berücksichtigt auch weil die Untersuchungen mehrere Defizite darin offenbart haben. Als Folge dieser Ergebnisse hat der Europäische Rat die Mitteilung der Europäischen Kommission zur Verbesserung der Qualität der Lehrerausbildung, sowie die zugehörigen Schlussfolgerungen, angenommen. [2]

Dieser Schlussbericht basiert auf den Ergebnissen des Forschungsprojektes 'Lehrpläne im Rahmen der Lehrerausbildung in der EU', das vom Europäischen Rat finanziert und von dem Forschungsinstitut für Ausbildung (Koulutuksen tutkimuslaitos, KTL) der Universität Jyväskylä durchgeführt wird. Der Schwerpunkt des Projekts lag auf den Fähigkeiten und Kompetenzen der Lehrer/innen, auf die sich die genannten Dokumente des Europäischen Rates beziehen.

Die Untersuchung hatte die Absicht, einen Überblick über die Lage der LA-Lehrpläne in 27 EU-Staaten zu bieten. Lehrer/innen auf allen Stufen allgemeiner Ausbildung wurden mitgerechnet, ausschließlich Berufsausbildung. Die Untersuchung sollte die Lehrpläne für die Erstausbildung von Lehrer/innen sowie Einführungsperioden und berufsbegleitende Lehrerfortbildung einschließen.

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[2] The Commission Communication 'Improving the Quality of TE (Brussels, 3 Aug. 2007) (http://ec.europa.eu/education/com392_en.pdf)
 The related Council Conclusions (Brussels, 26 Okt. 2007) (http://register.consilium.europa.eu/pdf/en/07/st14/st14413.en07.pdf)

Methodologische Verfahrensweisen

Verschiedene Datensammlungsmethoden wurden in diesem Forschungsprojekt eingesetzt. Die heterogenen Informationsquellen haben die Reliabilität, Tiefe und Nutzbarkeit der gesammelten Daten wesentlich verbessert. Die Daten wurden in den Jahren 2008–2009 gesammelt, und sie umfassen

1) Dokumentendaten (Annex 3a-3d), LA-Lehrpläne und andere LA-Dokumente, die von über 100 Netzwerkkontaktpersonen gesammelt wurden und aus z.B. den EURYDICE- und OECD-Datenbanken stammen. Die Daten repräsentierten offizielle Veröffentlichungen bezüglich der Gesetzgebung, Vorschriften, usw., sowie Datenbankeninformationen. Die existierenden LA-Netzwerke verschiedener Organisationen, sowie die eigenen Verbindungen des KTL, wurden sehr effizient eingesetzt, als für diese Untersuchung ein neues Netzwerk (Tabelle 3) gebildet wurde.
2) *Die Antworten der Netzwerkfachleute* stellten uns mehr aktuelles Wissen zur Verfügung, das oft außerhalb der dokumentierten Daten lag.
3) Die *Datensammlung mittels Fragebogen* hat sich in vieler Hinsicht als relevant für die Forschungsfragen erwiesen und die Ergebnisse anderer Daten bestätigt.
4) *Die Interviewdaten* bestehen aus 38 Interviews aus Katalonien, Estland, Finnland, Frankreich, Italien, Rumänien und Schottland (Tabelle 5). Der Konsistenz und Reliabilität halber wurden die Interviews mit Hilfe einer semistrukturierten Interviewmethode ausgeführt. Sie waren eine wirksame Methode, um weitere qualitative Daten über die gewählten Mitgliedstaaten zu erlangen. Die Schilderungen der einzelnen Mitgliedstaaten wurden mit den Interviewten auf Verifikation und Gültigkeit geprüft.

Um eine gemeinsame Verständigung über die Fähigkeiten und Kompetenzen zu finden, die in den EU-Dokumenten genannt wurden, wurden die Kompetenzen in acht Gruppen eingeteilt: Fachkompetenzen, pädagogische Kompetenzen, die Integration von Theorie und Praxis, Kooperation und Kollaboration, Qualitätssicherung, Mobilität, Menschenführung, und Fortbildung und lebenslanges Lernen. Diese Gruppen sollten möglichst umfangreich sein, aber gleichzeitig sollten sie in den verschiedenen Ländern identisch genug verstanden werden. Um die Reliabilität und Validität der Forschung zu erhöhen und um eine gemeinsame Verständigung über die Fähigkeiten und Schlüsselkompetenzen der Lehrerbildungslehrpläne und anderer Dokumente zu erreichen, wurden die Cluster mit bestimmten Hauptfähigkeiten und -kompetenzen beschrieben (Tabelle 4).

Definition von Lehrerkompetenzen

Es gibt viele Unterschiede zwischen den Ländern in Bezug auf die Weise und den Grad, in denen die Schlüsselfähigkeiten und -kompetenzen des Lehrerberufes potenziell in den LA-Lehrplänen und in anderen LA-Dokumenten erwähnt werden. Die Untersuchung hat sowieso offenbart, dass viele von den Fähigkeiten und Kompetenzen, die in den Dokumenten der Kommission als qualitätsrelevant erwähnt sind, irgendwie in die LA-Lehrpläne oder andere LA-Dokumente der meisten

Mitgliedstaaten integriert worden sind, auch wenn der Grad der Integration und die gebrauchten Begriffe bedeutend variieren.

Viele von den in den EU-Dokumenten erwähnten Fähigkeiten und Schlüsselkompetenzen sind ziemlich generell, z.B. inhaltliche oder pädagogische Kompetenzen und das Integrieren von Theorie und Praxis, die unbedingt der LA zugerechnet werden müssen. Die Kompetenzen, die am wenigsten in den nationalen Dokumenten vorkommen, sind diejenigen, die in dieser Untersuchung unter den Kategorien von Qualitätssicherung, Mobilität oder Menschenführung erwähnt werden.

Die verschiedenen Phasen der Lehrerausbildung – Erstausbildung, Einführung, und Fortbildung – werden sehr unterschiedlich in den LA-Dokumenten behandelt. Zum Beispiel berufsbegleitende Lehrerfortbildung wurde in den Dokumenten kaum genannt, und nur in wenigen Dokumenten wurden solche Kompetenzen hervorgehoben, die man bei der Planung von Lehrerfortbildungsinhalten, Methoden usw. berücksichtigen sollte.

Es gibt drei grundsätzliche Modelle hinsichtlich der Ebene, auf der es über die erforderlichen Lehrerkompetenzen entschieden wird (Tabelle 6):

1. Die Kompetenzanforderungen werden detailliert auf nationaler Ebene bestimmt (oder in Bundesländern auf regionaler Ebene), d.h. sie werden von einem Ministerium oder von einem anderen Regierungsorgan bestimmt;
   dies ist der Fall in 5 Ländern: Cypern, Estland, Deutschland, Slowenien, Vereinigtes Königreich.

2. Die Kompetenzanforderungen werden in den Hauptzügen auf nationaler Ebene festgelegt (oder in Bundesländern auf regionaler Ebene), z.B. von einem Ministerium oder einem anderen Regierungsorgan, aber sie werden auf einer niedrigeren Ebene adaptiert oder weiter spezifiziert, z.B. im Auftrag von einer Lehrerausbildungsinstitution;
   dies ist der Fall in 18 Ländern: Österreich, Belgien, Bulgarien, Dänemark, Frankreich, Ungarn, Irland, Italien, Lettland, Litauen, Luxemburg, Niederlande, Poland, Portugal, Rumänien, Slowakei, Spanien, Schweden.

3. Die Kompetenzanforderungen werden auf einer niedrigeren Ebene festgelegt, z.B. von einer Lehrerausbildungsinstitution;
   dies ist der Fall in 4 Ländern: die Tschechische Republik, Finnland, Griechenland, Malta.

In solchen Ländern, in denen nationale Lehrorgane unter Ministerien oder Regierungen (z.B. Bildungsräte) LA-Programme entwickeln, akkreditieren und evaluieren, oder in denen sie den Zugang zum Lehrerberuf kontrollieren, hat man gewöhnlich die von Lehrern/Lehrerinnen geforderten Kompetenzen expliziter beschrieben. Dies ist der Fall zum Beispiel in den folgenden sechs Ländern: Estland, die Tschechische Republik, Deutschland, Irland, Slowenien, Vereinigtes Königreich. In den Ländern, in denen einzelne Lehrerbildungsinstitutionen für LA-Lehrpläne und deren Ausführung verantwortlich sind, und zugleich mehr Freiheit bei der Planung und Verwirklichung haben, sind die Kompetenzen heterogener beschrieben worden.

Die einzelnen Länder sind sehr unterschiedlich auch bezüglich der Häufigkeit der Aufführung von den Kompetenzen in den Texten der EU sowie in nationalen (Regierungs-) Dokumenten. Inhaltliche und pädagogische Kompetenzen sowie die Integration von Theorie und Praxis werden in den Dokumenten aller Länder erwähnt. Solche Kompetenzgruppen wie Qualitätssicherung, Mobilität, Menschenführung, kontinuierliches und lebenslanges Lernen kommen seltener vor als Lehrerkompetenzen in den LA-Lehrplänen für sowohl die Primär- als auch die Sekundärstufe.

Man sollte auch bemerken, dass es Unterschiede zwischen Primär- und Sekundärstufenlehrerausbildung gibt: Sie legen unterschiedliches Gewicht auf inhaltliche und pädagogische Kompetenzen, auf die Integration von Theorie und Praxis, auf Kooperation und Kollaboration und auf Qualitätssicherung. Zum Beispiel wurden pädagogische Kompetenzen als wichtiger in Primärstufenlehrerausbildung betrachtet als in Sekundärstufenlehrerausbildung.

Im Allgemeinen wurden die inhaltlichen und pädagogischen Kompetenzen, sowie die Kompetenzen bezüglich der Integration von Theorie und Praxis und Qualitätssicherung, vor allem auf nationaler Ebene bestimmt; die übrigen Kompetenzen wurden auf der Ebene der Universitäten oder LA-Institutionen berücksichtigt, falls sie überhaupt berücksichtigt wurden.

Definition der LA-Lehrpläne

Im Prinzip werden Erstausbildungslehrpläne sowohl auf nationaler als auch auf institutioneller Ebene bestimmt, oder sonst ausschließlich auf institutioneller Ebene. Es gab kein einziges Land, in dem die LA-Lehrpläne nur auf eine zentralisierte Weise auf nationaler Ebene bestimmt würden. In Bundesstaaten (z.B. Österreich, Deutschland, Spanien und Vereinigtes Königreich) haben die einzelnen Bundesländer gewöhnlich ihre eigene Gesetzgebung für LA, auch wenn die Rahmen auf nationaler Ebene bestimmt werden.

Es gibt also zwei prinzipielle Modelle (Tabelle 7) hinsichtlich der Ebene, auf der die Schlüsselbeschlüsse über den Inhalt der Erstausbildungslehrpläne gemacht werden (egal ob sie als Lehrgegenstände oder Lernresultate beschrieben werden):

1) In 24 Ländern bieten die nationalen Dokumente, Gesetze und Regel allgemeine Rahmen und Richtlinien für das Organisieren von LA in den Lehrerausbildungsinstitutionen, und diese Institutionen planen ihre LA-Lehrpläne ziemlich selbstständig.

2) Nur in drei Ländern, nämlich in Griechenland, Luxemburg und Malta, sind die LA-Institutionen sehr selbstständig und bestimmen die Struktur und den Inhalt der Erstausbildungslehrpläne autonom.

In den verschiedenen Ländern gibt es keinen zuverlässigen Rahmen hinsichtlich der Entscheidungen über den Lehrplaninhalt für Einführungsperioden und Lehrerfortbildung. Dieser Mangel ergibt sich aus der üblichen europäischen Situation, in der Einführung und Fortbildung organisiert werden. Sie scheinen sehr

heterogen arrangiert zu werden, und es ist nicht klar, wie die Lehrpläne für diese Phasen bestimmt worden sind oder was die Kursinhalte sind – oder nicht einmal, welcherlei Ausbildungsbedürfnisse die Lehrer/innen in diesen Phasen in den verschiedenen Ländern haben.

Organisation von Lehrerausbildung (LA)

Letztlich regulieren die Regierungen aller Mitgliedstaaten auf irgendeine Weise die Rolle, die LA in der Hochschulbildungspolitik des Landes besitzt. Infolgedessen gibt es verschiedene Weisen, auf die LA in den Ländern arrangiert wird. Fast alle Länder erwähnen LA in ihren Gesetzen (z.B. die Definition akademischer Abschlussgrade, die Umsetzung des Bologna-Prozesses in diese Abschlussgrade) oder bieten einen Rahmen oder prinzipielle Regeln für das Organisieren von LA in den LA-Institutionen, entweder völlig oder teilweise. Es gab keinen Beweis von solchen Mitgliedstaaten, in denen weder die Regierung noch ein Regierungsamt Richtlinien für die Führung von LA geben würde. Auch wenn es festgelegt wäre, dass LA-Lehrpläne in autonomen LA-Institutionen geschaffen werden, scheint die Organisation von LA komplizierter zu sein. Auch bei Fällen, in denen es ziemlich viel institutionelle Autonomie gibt, scheinen einige Richtlinien von einem höheren Niveau zu kommen; wenn nicht von dem nationalen Niveau, dann am Wahrscheinlichsten von dem Universitätsniveau.

Zusammenfassung

Die gemeinsamen europäischen Grundsätze für Kompetenzen und Qualifikationen von Lehrkräften (2005) und *die Mitteilung der Kommission zur Verbesserung der Qualität der Lehrerausbildung* (2007) haben als Hintergrund dieser Untersuchung gedient. Sie haben die Qualität des Lehrens und der Lehrerausbildung als einen Schlüsselfaktor bei der Qualitätssicherung von Ausbildung identifiziert, sowie bei der Verbesserung der Ausbildungsleistungen der Schüler/innen und Studenten/innen. Auf Grund der Untersuchungsergebnisse kann die heutige Situation bezüglich dieser zwei LA-Dokumente wie folgt evaluiert werden:

Die beiden Dokumente unterstreichen den Professionalismus der Lehrkräfte, damit junge Leute den Beruf attraktiv finden. Ein hochqualifizierter Lehrerberuf mit vielfältigen Kenntnissen, Fähigkeiten und Kompetenzen ist hervorgehoben worden. Pädagogische und inhaltliche Kompetenzen sind traditionell in LA unterstrichen worden, und das Gewicht der Beziehung zwischen Theorie und Praxis ist weitgehend bemerkt worden. Andererseits sind einige Fähigkeiten und Kompetenzen, die in den letzten Jahren aktueller gewesen sind, noch nicht genug beim Entwickeln der LA berücksichtigt worden. Zum Beispiel den Unterricht in heterogenen Klassen und ein effizienteres Verstehen der Schülern/innen und Studenten/innen mit unterschiedlichen Kulturhintergründen sollte man ernsthafter in den LA-Lehrplänen berücksichtigen.

Die beiden Dokumente betonen, dass der Lehrerberuf mit der umgebenden Gesellschaft und deren Akteuren eng verbunden sein sollte. Deswegen werden Kooperations- und Kollaborationsfähigkeiten, sowie die Verbesserung von Kommunikationsfähigkeiten in der Zukunft noch bedeutsamer sein. Auf Grund der

Untersuchungsergebnisse sind diese Aspekte nicht genügend in den LA-Dokumenten berücksichtigt worden.

In den beiden Dokumenten werden die Prinzipien des lebenslangen Lernens sowie die persönliche Entwicklung im Lehrerberuf betont. Diese Umstände sollen in der Zukunft stärker berücksichtigt werden. Um die Idee eines Kontinuums im Lehrerberuf zu fördern, muss es angenommen werden, dass die Einführungsphase neuer Lehrer/innen zunehmend entwickelt und unterstützt wird, und dass berufsbegleitende Lehrerfortbildung stärker berücksichtigt wird. Viele EU-Mitgliedstaaten haben berufsbegleitende Lehrerfortbildung noch nicht richtig entwickelt. Sogar in solchen Ländern, in denen sie obligatorisch ist, ist sie ungenügend, und die Fähigkeiten und Kompetenzen, die durch Lehrerfortbildung entwickelt und unterstützt werden sollten, sind nicht umfassend gesichtet worden.

Die gängige Situation bezüglich der Verbesserung der Qualität von LA im europäischen Kontext zusammenfassend können wir feststellen, dass die Diskussion, die die Europäische Kommission unter den Mitgliedstaaten erweckt hat, ist sehr wertvoll gewesen, weil sie die Entwicklung der LA in der EU stimuliert hat. Dies bemerkt man in den konkreten Aktionen der Mitgliedstaaten, um ihre LA-Politik zu entwickeln, und spezifischer ausgedrückt, um die Fähigkeiten und Kompetenzen, die zukünftige Lehrer/innen während ihrer ganzen Karriere benötigen werden, zu bestimmen. In dieser Arbeit sind die Empfehlungen der EU von großer Bedeutung.

Empfehlungen und Vorschläge für zukünftige Forschungsprojekte

Empfehlungen für Lehrerbildungspolitik

- Diskussion über eine effektive Regelungspolitik der Lehrerausbildung anregen
- Diskussion über die Fähigkeiten und Schlüsselkompetenzen der Lehrer/innen anregen, um eine gemeinsame Verständigung darüber zu schaffen
- Eine Plattform für effiziente Informationsteilung schaffen
- Die besten Lehrerbildungsverfahren austauschen
- Die Rolle der Schlüsselexperten bei der Entwicklung der Lehrerausbildung betonen und unterstützen
- Die Rolle der Lehrer/innen und anderer Lehrerbildungsakteure bei der Entwicklung der Lehrerausbildung betonen und unterstützen
- Die Mobilität der Lehrer/innen, Lehrerausbilder/bilderinnen und Lehrerstudenten/studentinnen betonen und unterstützen
- Den Status und die Rolle der Lehrerausbildung in der Hochschulpolitik erhöhen
- Eine forschungsbasierte Ausbildung in der Lehrerbildung unterstützen
- Die Interaktion zwischen Theorie und Praxis in der Lehrerbildung unterstützen
- Die Ressourcen für alle drei Zyklen in der Lehrerausbildung garantieren
- Die Attraktivität des Lehrerberufs verbessern
- Die Möglichkeiten verbessern, Lehrer/innen zu rekrutieren
- Ein Kontinuum für die berufliche Entwicklung der Lehrer/innen schaffen

- Lebenslanges Lernen der Lehrer/innen unterstützen, z.B. durch das Unterstützen der Schulen und durch die Förderung der persönlichen Entwicklungspläne der Lehrer/innen
- Die Kompetenzen berücksichtigen, die beim Unterricht für erwachsene und reife Studenten/Studentinnen in der Lehrerausbildung relevant sind

Vorschläge für zukünftige Forschungsprojekte

- Das Netzwerk von Lehrerbildungsexperten, das in diesem Projekt gebildet wurde, sowie Lehrer/innen und andere Akteure in den zukünftigen Entwicklungsprojekten einsetzen, um eine solide Forschungsbasis für die Entwicklung der Lehrerausbildung zu fördern
- Projekte bezüglich der Effektivität der Lehrerausbildung
- Projekte bezüglich der Effizienz der Lehrerausbildung
- Projekte bezüglich der relevanten Fähigkeiten und Schlüsselkompetenzen des modernen Lehrerberufs, und diese in den Erstausbildungs-, Einführungs- und Fortbildungsphasen betonen
- Forschung zur Qualität der Lehrerausbildung
- Bedarfsanalysen der Lehrer/innen bezüglich ihrer Fähigkeiten und Kompetenzen während des ganzen Kontinuums

Schlüsselwörter: Lehrerausbildung, Fähigkeiten, Kompetenzen, Hochschulausbildung, Bildungspolitik

RÉSUMÉ

Préliminaires

Le projet « Les programmes de formation des enseignants dans l'UE » se fonde sur les travaux de la Commission européenne dans le cadre du programme de travail « Éducation et formation 2010 », en particulier dans le domaine de la politique scolaire. À Lisbonne, en 2000, le Conseil européen a fixé à l'Union européenne l'objectif stratégique majeur de devenir en 2010 l'économie fondée sur le savoir la plus compétitive et la plus dynamique du monde, capable d'une croissance économique durable avec un plus grand nombre d'emplois, et de meilleurs emplois, et une plus grande cohésion sociale. Le programme de travail insistait sur le fait que les enseignants et les formateurs sont au cœur de l'agenda de Lisbonne et a souligné les principaux domaines de travail : identifier les compétences que les enseignants et les formateurs devraient posséder, fournir les conditions pour les soutenir de manière adéquate, y compris dans la formation professionnelle initiale et continue, et aborder les questions de recrutement liées à l'attractivité et à la flexibilité dans les itinéraires professionnels pour les personnes qui changent de carrière. La qualité de la formation des enseignants est considérée comme un facteur clé pour déterminer si l'Union européenne peut accroître sa compétitivité dans une économie de plus en plus mondialisée.

La préoccupation au sujet de la formation des enseignants en Europe est également soulevée par des études qui ont révélé plusieurs lacunes dans celle-ci. Ces résultats ont ainsi amené l'UE à adopter la communication de la Commission « Améliorer la qualité des études et de la formation des enseignants », et les conclusions du Conseil Éducation et formation relatives à celle-ci.[3]

Le présent rapport final se fonde sur les résultats du projet de recherche « Programmes de formation des enseignants dans l'UE » financé par la Commission européenne et réalisé par l'Institut finlandais de recherche en éducation (FIER), de l'université de Jyväskylä. Le principal objectif du projet portait sur les compétences des enseignants, en référence aux documents de l'UE mentionnés.

L'étude devait fournir un aperçu de la situation en ce qui concerne les programmes de formation des enseignants dans les 27 États membres, en incluant des enseignants de tous les niveaux de l'enseignement général, mais à l'exclusion de la formation professionnelle. Elle doit également porter sur la formation première des enseignants, les périodes de stage et la formation des enseignants en activité.

Approches méthodologiques

Dans ce projet de recherche, une variété de méthodes de collecte de données ont été utilisées. L'utilisation de différentes sources d'information a amélioré de façon essentielle la fiabilité, la portée et l'utilité des données recueillies. Les données ont été recueillies en 2008-2009 et comprennent :

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3 Communication de la Commission « Améliorer la qualité des études et de la formation des enseignants » (Bruxelles, 3 août 2007) (http://ec.europa.eu/education/com392_fr.pdf) (Annexe 1)
Conclusions du Conseil (Bruxelles, 26 octobre 2007)
(http://register.consilium.europa.eu/pdf/fr/07/st14/st14413.fr07.pdf) (Annexe 2)

1. les *Données documentaires* (Annexe 3a-3d). Des programmes de formation des enseignants et d'autres documents relatifs à ceux-ci collectés par plus de 100 personnes de contact faisant partie du réseau, et à partir de, notamment, la banque de données EURYDICE et des banques de données de l'OCDE. Les données représentaient les publications officielles concernant la législation, les réglementations, etc., ainsi que des informations sur les banques de données. Lors de la création d'un nouveau réseau dans l'objectif de cette étude (Tableau 3), une utilisation très efficace a été faite des réseaux existants concernant la formation des enseignants et impliquant divers types d'organisations, ainsi que des propres contacts du FIER.
2. *La réponse de la part du réseau d'experts* a fourni l'information la plus récente, souvent plus à jour que celle fournie par les données documentaires.
3. *Le questionnaire de collecte des données* a montré qu'il était, à bien des égards, pertinent pour donner des réponses aux questions de recherche et pour valider les résultats obtenus à partir d'autres données.
4. Les *Données recueillies par entretien* consistent en 38 entretiens réalisés en Catalogne, Espagne, Estonie, Finlande, France, Italie, Roumanie et Écosse (Tableau 5) . Pour des raisons de cohérence et de fiabilité, les entretiens ont été réalisés sous la forme d'un entretien semi-structuré. Les entretiens ont fourni de façon efficace plus de données qualitatives sur les États membres sélectionnés. Les descriptions des entretiens (Annexe 8) concernant chaque État membre ont été contrôlées avec les personnes interrogées pour vérification et validation.

Pour permettre d'acquérir une compréhension commune des connaissances et des compétences mentionnées dans les documents de l'UE, les compétences ont été regroupées en huit groupes : compétences dans la matière, compétences pédagogiques, intégration de la théorie et de la pratique, coopération et collaboration, garantie de la qualité, mobilité, leadership, formation continue, et apprentissage tout au long de la vie. Ces groupes doivent être aussi vastes que possible et en même temps être compris d'une manière identique, autant que faire se peut, dans les différents pays. Pour améliorer la fiabilité et la validité de l'étude et obtenir une compréhension commune des connaissances et des compétences clés dans les programmes de formation des enseignants et d'autres documents relatifs à la formation des enseignants, les groupes ont été décrits par le biais de certaines connaissances et compétences essentielles (Tableau 4).

La définition des connaissances et compétences requises dans la profession d'enseignant

On constate de très importantes disparités entre les pays concernant le fait de savoir comment et dans quelle mesure les connaissances et les compétences clés nécessaires à la profession d'enseignant sont mentionnées, à supposer qu'ils le soient seulement, dans les programmes concernant la formation des enseignants et les autres documents relatifs à celle-ci. Cependant, l'étude a montré que dans la plupart des États membres, de nombreuses connaissances et compétences clés mentionnées dans les documents de la Commission concernant la qualité de la formation des enseignants ont été inclues, d'une manière ou d'une autre, dans les programmes de formation des enseignants ou d'autres documents relatifs à celle-ci,

mais qu'il règne une grande variété dans les concepts utilisés et le degré où ils ont été utilisés.

De nombreuses connaissances et compétences clés citées dans les textes de l'UE sont tout à fait générales, telles que les compétences propres à chaque matière ou les compétences pédagogiques, ou l'intégration de la théorie et de la pratique, qui doit nécessairement être inclue dans la formation des enseignants. Les compétences qui sont les moins couramment mentionnées dans les documents nationaux sont celles figurant dans les catégories de cette étude, à savoir la garantie de qualité, la mobilité et le leadership.

Les différentes phases de la formation des enseignants, la formation première, les périodes de stage, et la formation des enseignants en activité sont traitées de façon très différente dans les documents relatifs à la formation des enseignants. Par exemple, la formation des enseignants en activité n'est pratiquement pas mentionnée dans les documents et seul un petit nombre de documents relatifs à la formation des enseignants mettaient l'accent sur les connaissances et les compétences qui devraient être prises en considération lors de la planification des contenus, des méthodes, etc., pour la formation des enseignants en activité.

En ce qui concerne le niveau auquel sont prises les décisions importantes concernant les compétences requises pour être employé comme enseignant, il existe trois modèles de base (Tableau 6) :

1. Les exigences en matière de compétences sont définies en détail au niveau national (ou, dans les États fédéraux, au niveau régional), par un ministère ou un autre organisme d'État ; c'est le cas dans 5 pays, à savoir : Chypre, Estonie, Allemagne, Slovénie, Royaume-Uni.

2. Les exigences en matière de compétences sont définies dans leurs grandes lignes au niveau national (ou, dans les États fédéraux, au niveau régional), par exemple par un ministère ou un autre organisme d'État, mais elles sont adaptées ou définies plus précisément à un niveau inférieur, par exemple par un établissement de formation des enseignants. C'est le cas dans 18 pays, à savoir : Allemagne, Autriche, Belgique, Bulgarie, Danemark, France, Hongrie, Irlande, Italie, Lettonie, Lituanie, Luxembourg, Pays-Bas, Pologne, Portugal, Roumanie, Slovaquie, Espagne, Suède.

3. Les exigences en matière de compétences sont fixées à un niveau inférieur, par exemple par un établissement de formation des enseignants. C'est le cas dans 4 pays, à savoir : République tchèque, Finlande, Grèce, Malte.

Les pays où des organismes d'enseignement de niveau national, relevant de ministères ou de l'État (par exemple des Conseils de l'Éducation) qui mettent au point, valident et évaluent les programmes de formation des enseignants, ou qui contrôlent l'accès à la profession enseignante, ont tendance à avoir une description plus explicite et plus détaillée des compétences que les enseignants sont tenus de posséder. C'est le cas, par exemple, dans ces six pays : l'Estonie, la République tchèque, l'Allemagne, l'Irlande, la Slovénie, le Royaume-Uni. Dans les pays où la responsabilité des programmes en matière de formation des enseignants et leur mise en œuvre se trouvent dévolus à des établissements de formation des

enseignants distincts jouissant d'une plus grande liberté d'action dans la planification et la mise en œuvre, la définition des compétences est plus variable.

La mesure dans laquelle les compétences sont mentionnées dans les textes de l'UE et aussi dans les documents nationaux (gouvernementaux) varie de façon considérable d'un pays à l'autre. Les compétences dans la matière, les compétences pédagogiques et l'intégration de la théorie et de la pratique sont mentionnées dans les documents de tous les pays. Les groupes de compétences tels que la garantie de la qualité, la mobilité, le leadership, la formation continue et l'apprentissage tout au long de la vie en tant que compétences des enseignants sont moins répandus, tant dans les programmes de la formation des enseignants du primaire et que de ceux du secondaire.

Il convient également de noter qu'il existe des différences entre la formation des enseignants du primaire et du secondaire en ce qui concerne l'importance accordée aux compétences dans la matière, aux compétences pédagogiques, à l'intégration de la théorie et la pratique, à la coopération et la collaboration et à la garantie de la qualité. Par exemple, les compétences pédagogiques sont considérées comme plus importantes dans la formation des enseignants du primaire que dans le secondaire.

En règle générale, ce sont essentiellement les compétences dans la matière, les compétences pédagogiques, les compétences concernant l'intégration de la théorie et de la pratique et la garantie de la qualité qui sont définies au niveau national, les autres aspects sont pris en considération au niveau de l'université ou de l'établissement de formation des enseignants, et dans certains cas ne le sont pas du tout.

Définition des programmes de formation des enseignants

En principe, les programmes de formation initiale des enseignants ont été définis à la fois au niveau national et au niveau des établissements, ou seulement au niveau des établissements. Il n'y a pas de pays où les programmes de formation des enseignants ne soient définis que de manière centralisée au niveau national. Dans les États fédéraux (par exemple Autriche, Allemagne, Espagne et Royaume-Uni) les États ont généralement leur propre compétence en matière de formation des enseignants, même si les cadres sont déterminés au niveau national.

Ainsi, concernant le niveau de prise de décision auquel sont prises les décisions essentielles portant sur le contenu des programmes de formation initiale des enseignants (qu'ils soient décrits comme des sujets à enseigner, ou comme des résultats d'apprentissage), deux modèles de base existent (Tableau 7.) :

1. Dans 24 pays, les documents nationaux, les lois et règlements fournissent des directives générales et des cadres sur la façon dont la formation des enseignants doit être organisée dans les établissements de formation d'enseignants, les établissements concevant leurs programmes de formation de façon relativement indépendante.

2. Dans trois pays seulement, Grèce, Luxembourg et Malte, les établissements de formation des enseignants sont tout à fait indépendants et définissent la

structure et le contenu des programmes de formation initiale des enseignants de manière autonome.

Aucune tendance générale concernant les décisions sur le contenu des programmes d'études pour la formation des enseignants lors des période de stage ou en activité n'a émergé de façon nette. Ceci est dû à la situation générale en Europe de l'organisation la formation des enseignants en stage et en activité. Ces formations semblent être organisées de manière très hétérogène et il n'est pas évident de savoir comment les programmes d'études pour ces phases ont été fixés ni quels sont les contenus des cours, ni même quels sont les besoins éducatifs des enseignants à ce stade dans les différents pays.

Organisation de la formation des enseignants

En dernier ressort, dans chaque État membre, c'est l'État qui définit, d'une manière ou d'une autre, le rôle de la formation des enseignants à l'intérieur de la politique en matière d'enseignement supérieur dans le pays. Par conséquent, il existe différentes façons d'organiser la formation des enseignants dans les pays. Pratiquement tous les pays font mention de la formation des enseignants dans la législation (par exemple définition des diplômes universitaires, application du processus de Bologne au système des diplômes) ou fournissent les cadres ou les règles générales de l'organisation de la formation des enseignants dans les établissements de formation des enseignants, soit intégralement, soit partiellement. On ne relève aucun cas d'État membre dans lequel ni l'État ni un organisme gouvernemental ne donne aucune directive sur la façon dont la formation des enseignants devrait être gérée. Bien que la législation prévoie que les programmes de formation des enseignants soient élaborés dans des établissements de formation d'enseignants autonomes, l'organisation de cette formation semble être plus compliquée. Il semble que, même dans les cas où les établissements jouissent d'une autonomie assez importante, des directives émanent d'un niveau supérieur ; si ces directives ne sont pas émises au niveau national, elles ont toutes les chances d'être conçues au niveau universitaire.

Conclusions

Les « *Principes européens communs concernant les compétences et qualifications des enseignants* » (2005) et la Communication de la Commission « *Améliorer la qualité des études et de la formation des enseignants* » (2007) ont fourni la base de cette étude. Ils ont identifié la qualité de l'enseignement et de la formation des enseignants comme un facteur clé dans la garantie de qualité de l'éducation et l'amélioration de la réussite scolaire des jeunes. Selon les résultats de l'étude, la situation actuelle concernant ces deux documents relatifs à la formation des enseignants peut être évaluée comme suit :

Les deux documents mettent l'accent sur le haut degré de professionnalisme des enseignants ; la profession d'enseignant devrait être attractive pour les jeunes. On y souligne l'importance pour la profession d'enseignant d'un haut niveau de qualification, avec des connaissances, des qualifications et des compétences diversifiées. L'importance des compétences pédagogiques et des compétences dans

la matière a été traditionnellement soulignée dans la formation des enseignants, de même qu'on a souligné l'importance de la relation entre la théorie et la pratique. Cependant, certaines aptitudes et compétences qui ont été plus à l'ordre du jour au cours de ces dernières années n'ont pas encore été suffisamment prises en considération dans le développement de la formation des enseignants. Par exemple, l'enseignement dans des classes hétérogènes ainsi qu'une compréhension plus efficace des élèves et étudiants issus de milieux culturels différents devraient être traités plus sérieusement dans les programmes de formation des enseignants.

Les deux documents considèrent qu'il est important que la profession d'enseignant soit étroitement reliée à la société environnante et aux acteurs qui y évoluent. C'est pourquoi les compétences en matière de coopération et de collaboration ainsi que l'amélioration des compétences communicationnelles seront encore plus importantes à l'avenir qu'elles ne l'ont été jusqu'à présent. Selon les résultats de cette étude, ces questions n'ont pas reçu l'attention qu'elles méritent dans les documents relatifs à la formation des enseignants.

Les deux documents insistent sur les principes d'apprentissage tout au long de la vie et de développement personnel dans la profession enseignante. Ces questions doivent se voir accorder une plus grande attention à l'avenir. Pour promouvoir l'idée d'un continuum dans la profession d'enseignant, il faut poser comme principe que la phase du stage des jeunes enseignants doit être améliorée et soutenue plus efficacement que jusqu'à présent, et qu'une plus grande attention doit être accordée à la formation des enseignants en activité que de nos jours. Aujourd'hui encore, dans de nombreux États membres, la formation continue n'a pas été développée de façon satisfaisante et, même dans les pays où elle est obligatoire pour les enseignants, la quantité est insuffisante, et les aptitudes et compétences qui devraient être un élément de la formation des enseignants en activité n'ont pas été envisagées de manière globale.

Pour résumer la situation actuelle en ce qui concerne l'amélioration de la qualité de la formation des enseignants dans le contexte européen, on peut dire que le débat suscité par la Commission européenne dans les États membres a été très utile pour stimuler le développement de la formation des enseignants dans l'UE. Cela se voit dans les mesures concrètes prises par les États membres pour améliorer leur politique en matière de formation des enseignants, et, en termes plus pratiques, dans la réflexion sur le type de connaissances et de compétences dont les futurs enseignants ont besoin pendant toute leur carrière. Dans ce travail, une importance non négligeable est attachée aux recommandations formulées par la Commission.

Recommandations et suggestions pour de futurs projets de recherche

Recommandations pour l'élaboration des politiques de formation des enseignants

- Susciter la discussion sur des politiques de pilotage efficaces de formation des enseignants
- Susciter la discussion sur les connaissances et les compétences clés des enseignants pour acquérir une compréhension commune de celle-ci
- Créer une plate-forme pour un partage efficace

- Partager les meilleures pratiques en matière de formation des enseignants
- Mettre l'accent sur et soutenir le rôle des principaux experts dans le développement de la formation des enseignants
- Mettre l'accent sur et soutenir le rôle des enseignants et des autres acteurs du secteur dans le développement de la formation des enseignants
- Mettre l'accent sur et soutenir la mobilité des enseignants, des formateurs d'enseignants et des étudiants se destinant à l'enseignement
- Améliorer le statut et le rôle de la formation des enseignants dans l'élaboration des politiques d'enseignement supérieur
- Promouvoir une formation des enseignants fondée sur la recherche
- Favoriser l'interaction entre la théorie et la pratique dans la formation des enseignants
- Garantir des ressources pour tous les trois cycles dans la formation des enseignants
- Améliorer l'attractivité de la profession enseignante
- Améliorer les possibilités de recrutement pour les enseignants
- Créer un continuum de développement professionnel des enseignants
- Soutenir l'apprentissage tout au long de à vie chez les enseignant, par exemple en apportant un soutien aux écoles et aux plans de développement personnel des enseignants
- Prendre en compte les compétences relatives à la formation des adultes et des étudiants adultes dans la formation des enseignants

Suggestions pour de futurs projets de recherche

- Utiliser le réseau d'experts en formation des enseignants créé dans ce projet, ainsi que les enseignants et les autres acteurs pour des projets futurs de développement, afin d'établir une solide base de recherche en vue de l'amélioration de la formation des enseignants
- Projets concernant la visibilité de la formation des enseignants
- Projets concernant l'efficacité de la formation des enseignants
- Projets concernant les connaissances et les compétences clés pertinentes dans la profession d'enseignant moderne et mettant l'accent sur celles-ci dans la formation initiale des enseignants, dans la période de stage et dans la formation des enseignants en activité
- Recherche portant sur la qualité de la formation des enseignants
- Analyses des besoins des enseignants concernant leurs connaissances et leurs compétences pendant tout le continuum.

Mots-clés : formation des enseignants, connaissances, compétences, enseignement supérieur, politique en matière de formation

1 INTRODUCTION

1.1 Background

'The Teacher Education Curricula in the EU' project is based on the work of the European Commission in the framework of the Education and Training 2010 work programme, in particular in the area of School policy. At Lisbon in 2000 the European Council set the Union the major strategic goal of becoming in 2010 the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. The 'Education and Training 2010' work programme, adopted by the Barcelona Council in March 2002, emphasised that teachers and trainers are central to the Lisbon agenda. The programme highlights key areas of work: identifying the skills that teachers and trainers should have; providing the conditions to support them adequately, including through initial and continuing professional development; and addressing recruitment issues about attractiveness and flexible routes into the profession for people changing careers.

In recent years both initial and in-service teacher education (TE) as well as the situation of newly qualified teachers have received a lot of attention from the European Commission (EC) and also in the Member States. The concern over TE in Europe is raised by studies that have revealed several shortcomings in TE. For example, in an OECD survey[4] (2005) almost all countries reported shortfalls in teaching skills and difficulties in updating these skills. Analyses have also shown that current systems for TE often fail to give teachers the skills and key competences they would need. These findings have accordingly prompted the European Commision to adopt the Commission Communication 'Improving the Quality of TE' (Brussels, Aug. 2007) (EC 2007a), which led to the adoption by the Education Council of Conclusions (Brussels, Oct. 2007)[5]. This resulted from the idea that the quality of TE is one key factor in determining whether the European Union can improve its education and training systems and so increase its competitiveness in the increasingly globalised world.

Behind the Communication there are some basic standpoints. In addition to the fact that current systems for teacher training and education in the Member States are often failing to give teachers the training they need, there are also other important reasons for promoting change. High-quality teaching is a prerequisite for high-quality education and training, which are in turn a powerful determinant of Europe's long-term competitiveness and capacity to create more jobs and growth. The Commission's proposals were designed to ensure that the EU has the highly-educated workforce it will need to face up to the pressures of the 21st century.

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[4] Organisation for Economic Co-operation and Development (OECD) (2005) *Teachers matter: Attracting, Developing and Retaining Effective Teachers.* Paris: OECD.

[5] The Commission Communication 'Improving the Quality of TE (Brussels, 3rd Aug. 2007) (http://ec.europa.eu/education/com392_en.pdf)

 The related Council Conclusions (Brussels, 26th Oct. 2007) (http://register.consilium.europa.eu/pdf/en/07/st14/st14413.en07.pdf)

However, because the teaching profession is necessary in every society, this profession should be a more attractive alternative for young people choosing their future working area. In Finland, for example, this is the situation nowadays, but not in most other countries.

In addition, the high proportion of older teachers in school education in the EU implies that within the period 2005-2015 more than one million teachers in Europe will have to be replaced[6]. High-quality initial teacher training, in conjunction with a process of continuous professional development, is necessary to equip the teaching body with skills and competences for its role in the knowledge society over the coming decades.

These findings have accordingly prompted the Commission Communication 'Improving the Quality of TE' and the related Council Conclusions. However, while the communications may raise discussion and launch policy developments so as to improve TE policies and politics across and beyond the EU, they are still but recommendations, albeit influential ones in arousing discussion and support to gain a common understanding about the issues which might improve the quality of TE in the Member States.

This final report is based on the results of the research project 'Teacher Education Curricula in the EU', financed by the EC and carried out by the Finnish Institute of Educational Research (FIER), University of Jyväskylä. The project covered all 27 EU Member States. The study was expected to provide a systematic, reliable survey of the situation regarding TE curricula across the EU countries and including teachers in all levels of general education, but excluding those in vocational education and training (VET). It should relate to curricula for initial TE, including induction periods where relevant, and to in-service TE.

The main focus of the project was on teachers' skills and competences as described in TE curricula in the Member States. The data for this study has been collected in 2008–2009 and consists of documents concerning TE, of email responses, of on-line questionnaire data collected[7] from TE experts from all Member States and of interviews made in seven case countries. The background data was collected from existing databases (e.g. EURYDICE[8] and OECD) as well as from the network

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[6] http://ec.europa.eu/education/policies/2010/doc/progressreport06.pdf

[7] Used later in the text: the questionnaire data

[8] The EURYDICE Network, established in 1980, produces reliable, readily comparable information on national education systems and policies. EURYDICE also acts as an observatory, highlighting both the diversity of systems and their common features. Working on behalf of policy-makers and the world of education, EURYDICE prepares and publishes:
• regularly updated descriptive analyses of the organization of education systems;
• comparative studies on specific topics of European interest;
• indicators on the various levels of education from pre-primary to tertiary education.
EURYDICE also has its own database, *EURYBASE*, which constitutes a further highly detailed reference source on education systems in Europe.
By circulating the results of its work, **EURYDICE** promotes better mutual understanding of these systems and the common issues that run through them.

consisting of over 100 TE experts from all Member States. The questionnaire was administered within the network for validating the data gathered. The interview data consists of 38 interviews from Catalonia, as a part of Spain, Estonia, Finland, France, Italy, Romania and Scotland, as a part of the UK. The interviews were carried out with a semi-structured interview method for the sake of consistency and reliability. Before submitting the final report, the descriptions concerning each Member State, if mentioned in the final report, were sent to the contact persons for verification and validation.

1.2   Conduct of the study

The project 'The Teacher Education Curricula in the EU' (Contract number 2007-2091-001-001-TRA-TRSPO) was carried out by the Finnish Institute of Educational Research (FIER) in the University of Jyväskylä, Finland, during the period 19th Dec. 2007 – 18th Aug. 2009 on behalf of the European Commission (EC).

The study concerns all 27 European Union Member States: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

The main purpose of the study is to assess the extent to which TE curricula currently provide teachers with the knowledge, skills and competences referred to in the Commission Communication 'Improving the Quality of TE', and in the related Council Conclusions.

The Commission has stated that, as a starting point for future work, it was necessary to understand to what extent current curricula for Teacher Education in the different Member States reflect the themes and priorities set out by Ministers of Education on 15th November 2007 (in their response to the Commission Communication on Improving the Quality of Teacher Education). These themes and priorities therefore complement and supersede those set out in the earlier document prepared by Member State experts 'Common European Principles for Teacher Competences and Qualifications'.

The study should provide a systematic and as reliable as possible survey of the situation regarding Teacher Education curricula in the EU, although some countries will be covered in more detail, for example in the case studies. The study should in principle refer to the education of teachers at all levels of general education but not to teachers in VET. It should also include a lifelong learning perspective on teachers' professional development, including initial Teacher Education, induction periods where relevant, and in-service Teacher Education, though in practice the availability of defined curricula for in-service Teacher Education may be limited.

See:
http://eacea.ec.europa.eu/education/eurydice/documents/european_glossary/036EN.pdf
http://eacea.ec.europa.eu/education/eurydice/index_en.php

Research team, organisation and responsibilities

The research team consisted of professor Jouni Välijärvi, director of the Finnish Institute of Educational Research, team leader in this research project; professor Hannele Niemi, vice-rector of the University of Helsinki, supervisor in this research project; professor Pauli Kaikkonen, Department of Teacher Education of Jyväskylä University, supervisor in this research project; adjunct professor, Dr. Ellen Piesanen, senior researcher from the Finnish Institute for Educational Research (FIER) and the main researcher in this research project.

The team leader, professor Jouni Välijärvi and the supervisors, professor Hannele Niemi and professor Pauli Kaikkonen, were responsible for the academic expertise of the project as well as for the quality assurance of the research project. Adjunct professor, senior researcher, Ellen Piesanen, was responsible for the practical implementation and reporting of the project. In addition, senior researcher Pasi Reinikainen worked on the project from 1 Jan. to 13 Aug. 2008. Application designer, Sakari Valkonen, has worked with the questionnaire data and made it usable for the analyses. Doctoral student Katarzyna Kärkkäinen has transcribed the English interviews and helped with the interview analyses. Ms. Tarja Hämäläinen has transcribed the Finnish interviews and helped with some technical tasks.

UniServices Ltd. has been responsible for matters related to the contract. UniServices Ltd. was also responsible for creating and maintaining the project's website under the platform of PedaNet, run by FIER. The website of the project has been updated according to the approved Inception and Interim reports as well as the Contract, the Terms of Reference and the original Tender[9].

Quality assurance

To ensure that the project proceeded according to the research plan and the schedule and to assure the quality standards of the research, the research team has monitored the project by self-evaluation and meeting regularly or whenever needed. External quality monitoring was carried out by UniServices Ltd, whose standards for quality monitoring are approved by the University of Jyväskylä. As quality assurance the supervisors as well as UniServices Ltd. evaluated the quality of the interim and final reports before sending them to the EC. Professor Marja-Leena Stenström from FIER has long experience as a coordinator and as a partner in several EU projects and will act as an external evaluator for the study.

Interaction between the Commission and FIER

Throughout the course of the study, there has been continuous interaction between the Commission and the researchers. The purpose of this interaction has been to guarantee that the study process follows the contract and assures the quality of the study. The representative of the contractor, Mr. Paul Holdsworth from the

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[9] http://www.peda.net/veraja/jyu/uniservices/teacher

Password to Management Instructions –item is **tecu2**
Password to Reports –item is **tecu3**

Commission, was sent monthly by e-mail a condensed progress report by means of a follow-up form, stating what had been achieved and how that compared to the target dates. Similarly, questionnaire drafts, interview themes, and the reports, etc., have been sent to the Commission for comments. This interaction and co-operation with the Commision has been very useful for carrying out the project.

To guarantee the quality of the study there have also been two meetings with the Commission in Brussels. The first, kick-off meeting was held at the beginning of the project in January 2008. In that meeting the context and the purpose of the study were specified. In addition, an updated list of themes and priorities was provided by the EC and the task for FIER was to make suggestions for refining the list to make it more manageable, to make sure it did not omit any major aspect of Teacher Education curricula, and to ensure that the definitions or teachers' skills and competences used would be clear and meaningful. For the list of clusters used in the study, see Table 4.

In the kick-off meeting it was made clear that the approach to studying TE curricula in EU at this level would be novel and that the main purpose of it was to map the current situation in EU countries. Therefore, it was decided that the project would proceed inductively, where the findings from the previous phase guide and focus actions in the next phase. Thus, a very detailed or definitive plan of study could not yet be made for the inception report but would be made at least partly for the interim report.

The second meeting with the Commission was held one year after the first one, in January 2009. The purpose of this meeting was to check the current situation of the project and to make further plans, as well as to outline the contents of the final report. The discussions and the decisions made in this second meeting were very useful in guiding the latest phase of the project. They also helped in the reporting by delimiting and focusing further study steps.

Challenges for conducting the study

Gaining adequate information about TE from Ministries and TE institutions and organizations in EU countries was a challenge for the project because the research team had no jurisdiction to oblige anyone to participate in the study. Thus, participation rate was expected to be a major challenge in this study.

In the end, the network for this project was created through existing networks (ATEE, TEPE, EURYDICE, OECD's PISA contacts, ELGPN, IEA's TIMSS etc. and with the contacts of the personnel of the FIER). As a result, the network consisted of representatives from all 27 Member States, mainly from universities and TE institutions, with fewer from ministries (Table 3, Annex 9), on average over three TE experts from each Member State. However, in many cases representatives of ministries pointed out possible contact persons, who thus, without a doubt, were leading TE experts in their countries. In many cases, these experts were consultants and leaders of national and, in some cases, of international TE policy making.

With regard to the network, the situation can be considered to be quite satisfactory. All of the TE experts in the network provided material related to TE curricula mostly

in English. Thus, possible language problems assumed to exist when planning the project were not an issue. In addition, many experts have expressed their willingness to take part in other common projects in the future. This is a very promising and important aspect when planning further projects.

In the beginning of the project there was perceived to be a challenge in accessing all the relevant national documents related to TE curricula from EU countries. There was an assumption that there might be very large variation, both in quality and availability of TE curricula and other documents covering pre-service, induction and in-service TE. This proved to be the case (see chapter 4.1). There was also an awareness that the documents would be culturally-bound, with the result that people outside of the culture might easily misinterpret them.

The background information from, for example, the EURYDICE databases had revealed that there would be a *huge diversity of TE systems within the EU,* which would have an impact on carrying out the study properly. In the kick-off meeting, an agreement was made to focus the information gathering on national ministry level but it was presumed that in many Member States this would obviously not be the level where curricula-related documentation could be found. However, the ambition of the research team was to obtain all the relevant documents and information about the topics related to the research questions.

There was also a suspicion that HE and TE systems would be undergoing continuous major reform, partly due to the Bologna Process, and that it would perhaps be somewhat difficult to obtain updated information about the present situation. This proved to be the case in some countries. In these cases, however, the network of national TE experts proved to be of immense value.

2 GENERAL CONTEXT OF THE STUDY

2.1 Concepts of skills and competences

Tthe concepts of 'skills' and 'competences' used in TE documents can be defined, for example, as follows:

Competence qualifications: Changes in working life often require changes in competences. By analysing these changes systematically, core competences can also be identified. *(Source: Finnish National Board of Education)*

Skills: An ability that has been acquired by training, e.g. literacy - the ability to read and write. *(Source: TheFreeDictionary)*

There were also parallel concepts used. The TE documents of different Member States revealed some variety of concepts used in the context of teachers' competences. Some TE documents employed concepts such as 'qualifications' or 'requirements' or 'specialisations', or 'guidelines', or 'capacities'. In the U.K. the Teaching Councils of England, Wales, Northern Ireland and Scotland use the concept of 'teacher standards', where the 'competences' are in the Standards.

In Ireland the main document is called 'Codes of Professional Conduct for Teachers', which include standards of teaching, knowledge, skill and competence**.** In this case, the purpose of the Codes is to assist the Council in achieving its objectives as set out in the Teaching Council Act.

2.2 Teachers' skills and competences in international discussion

During recent decades governments around the world have paid increasing attention to the recruitment, preparation and retention of teachers. Teacher supply and teacher quality have become significant policy issues, taken up by policy-makers at the highest levels. This is because teachers are seen by many governments as the 'lynchpin' of educational, economic and social reform.[10]

Thus, TE and its improvement have been given wide attention all over the world. New requirements such as an increasingly globalized labour market, sets challenges for various areas of society, not least for education and TE. The quality of general, vocational and higher education as well as adult and continuing education have increasingly come into focus. Improving education at different levels presumes a quality TE which can be guaranteed with adequate teachers' skills and competences.

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[10] Furlong, J., Cochran-Smith, M. & Brennan, M. (eds.) (2009) Policy and Politics in Teacher Education. International Perspectives. London: Routledge.

For example in the United States, 'The new teacher education' as Cochran-Smith (2009)[11] calls it, consists of three closely linked pieces: It is constructed as a public policy problem, based on research and evidence and driven by outcomes. Although policy-makers' attention to teacher training is not new, three aspects of teacher education policy are:

1) faith in policy to solve the problems of supplying well-qualified teachers;
2) shift in the location of policy-making from low profile and local decision-maker to highly publicized and high level state and federal decision-makers; and
3) emphasis on policy-relevant evidence in the discourse within the teacher education community itself.

According to Cochran-Smith, the central operating assumption of the evidence and research based feature of the new teacher education is that with clear goals, more evidence, and more 'light', practioners and policy-makers will make better decisions and teacher quality will improve. The central principle of the new focus on outcomes is that the effectiveness of teacher preparation can be assessed in terms of teachers' impact on outcomes, especially pupils' achievement, and that this information will lead to improved teacher preparation.

Similarly, many international study programmes have stressed the importance of the quality of TE and its improvement.

One of the most recent studies concerning teacher education and teachers' qualifications is the *OECD's TALIS[12] project,* which provides the first internationally comparative perspective on the conditions of teaching and learning, based on data from over 70,000 teachers and school principals who represent lower secondary teachers in the 23 participating countries. TALIS examines important aspects of professional development:

- teacher beliefs, attitudes and practices

- teacher appraisal and feedback and

- school leadership.

The first results of the *TALIS project* reveal, e.g. that the large majority of teachers are satisfied with their jobs and consider that they make a significant educational difference for their students. Teachers are also investing in their professional development, but in fact, three-quarters of teachers say that, in their school, the most effective teachers do not receive the most recognition and that their school principal does not take steps to alter the monetary rewards of a persistently

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[11] Cochran-Smith, M. (2009) The new teacher education in the United States: directions forward. In J. Furlong, M. Cochran-Smith and M. Brennan (eds.) Policy and Politics in Teacher Education. International Perspectives. London: Routledge, 9-20.

[12] OECD (2009) Teaching and Learning International Survey Creating Effective Teaching and Learning Environments: First Results from TALIS.

underperforming teacher. However, TALIS suggests that effective school leadership plays a vital role in teachers' working lives and that it can make an important contribution to shaping the development of teachers. In schools where strong instructional leadership is present, TALIS shows that school principals are more likely to use further professional development to address teachers' weaknesses identified in appraisals. Often, there are also better student-teacher relations, greater recognition given to teachers for innovative teaching practices and more emphasis on developmental outcomes of teacher appraisals and more collaboration between teachers.

The close associations that TALIS shows between factors such as a positive school climate, teaching beliefs, cooperation between teachers, teacher job satisfaction, professional development, and the adoption of a range of teaching techniques provide indications that public policy can actively shape the conditions for effective learning. At the same time, the fact that much of the variation in these relationships lies in differences among individual teachers rather than among schools or countries underlines the need for individualised and targeted programmes for teachers rather than just whole-school or system-wide interventions that have traditionally dominated education policy.

TIMSS 2007[13], involving approximately 425 000 students from 59 countries around the world, is also a recent study in a series of international assessments. The goal of the study was to provide comparative information about educational achievement across countries to improve teaching and learning in mathematics and science. Thus, for example, teachers' participation in professional development in mathematics has been regarded to be highly important for teachers.

Also the *PISA study*[14] emphases highly qualified teachers as a necessity for good results at all grades. For example, in Finnish culture, the profession of teacher has been seen as one of the most important, and considerable resources have consequently been invested in TE during recent decades.

2.3   Teacher education and economic growth

According to the EURYDICE database and the TE experts in the project network, the process of improving TE has begun in all Member States. However, this process has started using different methods in different countries and is at different phases. As

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[13] Mullis, I.V.S., Martin, M.O. & Foy, P. (2008) TIMMS 2007 International Mathematics Report. Findings from IEA's trends in International Mathematics and Science Study at the Fourth and the Eighth Grades. Boston College, TIMSS & PIRLS International Study Center, Lynch School of Education, http://timss.bc.edu/TIMSS2007/PDF/TIMSS2007_InternationalMathematicsReport.pdf

[14] Välijärvi, V., Linnakylä, P., Kupari, P., Reinikainen, P. & Arffman, I. (2002*) The Finnish Success in PISA – and Some Reasons Behind It.* Jyväskylä: Kirjapaino Oma.
Välijärvi, V., Linnakylä, P., Kupari, P., Reinikainen, P. & Arffman, I. (2007*) The Finnish Success in PISA – and Some Reasons Behind It 2. Jyväskylä*: Kirjapaino Oma*. Internet: http://ktl.jyu.fi/ktl/julkaisut/luettelo/vuosi_2007/d084

each country has paid attention to TE and its main concerns and has discussed them nationally and in a European context, the possible TE problems have become increasingly evident after. One of the major concerns is the political context of TE. For a long time the strong connections between economical and educational issues have been recognized. Economic power and political power are always connected to each other in one way or another.

Traditionally, economic growth has been connected to human capital[15]. Nowadays the issue is also related, for example, to the concept of knowledge economy[16]. The level and quality of TE have also been linked to globalization[17] [18]. All of these theories refer to the fact that a well-educated work-force is economically productive. To be well educated, pupils and students must have received education of a good quality, which is, as mentioned in the EU text, possible only with quality TE. Nowadays, however, criticism of these theories has arisen. The criticism suggests that improving the population's educational level no longer increases work productivity as was the case earlier[19]. Nevertheless, as economic aspects will continue to be seen as important also in future TE, politicians should take developing the quality of TE seriously. Thus, as the results of this study have also revealed, those countries which have committed to TE by investing in it and in improving its quality, realize that societal changes necessitate changes in TE to be able to meet TE's requirements.

Furthermore, access to TE will also be an important political issue in the future. In countries where immigration and mobility is increasing, as it is in all countries, there will also be increasing demand for teachers, at least for the following 20 years after children begin school, but higher and adult education will also increase, much further into the future. Also apart from demographical reasons, changes in the structure of society will also influence the demand for teachers. In those countries where the teaching profession is not very attractive, for one reason or another, the politicians

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[15] Adam Smith (1776) in his book 'An Inquiry into the Nature and Causes of the Wealth of Nations' defined four types of fixed capital (which is characterized as that which affords a revenue or profit without circulating or changing masters). The four types were: 1) useful machines, instruments of the trade; 2) buildings as the means of procuring revenue; 3) improvements of land and 4) human capital. *In Wikipedia*, human capital is defined as follows: 'Human capital refers to the stock of skills and knowledge embodied in the ability to perform labor so as to produce economic value. It is the skills and knowledge gained by a worker through education and experience. Many early economic theories refer to it simply as labor, one of three factors of production, and consider it to be a fungible - homogeneous and easily interchangeable'. (See http://en.wikipedia.org/wiki/Human_capital)

[16] Peters (2007) Knowledge economy, development and the future of higher education. Rotterdam: Sense Publishers.

[17] See e.g. Guzman, A., Rosa, P. & Arcangel, C. (2005) The Impact of Globalization on Teacher Education: The Philippines. Educational Research for Policy and Practice, 4 (2-3), 65-82. Springer.

[18] Dale, R. & Robertson, S. (2009) Globalisation and Europeanisation in Education. Oxford: Symposium Books.

[19] Pohjola, M. (2007) Työn tuottavuuden kehitys ja siihen vaikuttavat tekijät. Helsingin kauppakorkeakoulu. Kansantaloudellinen aikakauskirja 10, 3 (2), http://www.vm.fi/vm/fi/04_julkaisut_ja_asiakirjat/03_muut_asiakirjat/20070315Tyoentu/Pohjola150307.doc. (In Finnish)

should take care that access to TE is possible for everyone capable of becoming a teacher, especially if the demand is increasing.

However, if the quality of TE is at centre stage when developing society, teachers' skills and competences should also be at centre stage when planning future TE. But in this connection, if the teaching profession is considered to be one of the key professions in society, it is also important to increase – or maintain – the attractiveness of the teaching profession. To have teachers of good quality depends on the quality of TE, but also to what extent teachers stay in the teaching profession and do not transfer to other professions after having received their teaching qualification. The latter is also an issue which politicians should be concerned with. The attractiveness derives from several factors, such as salaries, working conditions, co-operative models, guidance, support, respect, professional development, etc. These should all be taken into consideration by politicians and TE developers.

2.4   Background to the project

According to the Terms of Reference, the background to the 'Teacher Education Curricula in the EU' study was the work of the European Commission in the framework of the Education and Training 2010 work programme[20], in particular in the area of School Education policy development. This programme took place against the background of the meeting of the Lisbon European Council, which was held in 2000. In that meeting Heads of State and Government set the Union the major strategic goal of becoming in 2010 "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion".

The three overall objectives and targets of the programme are:

- o improving the quality and effectiveness of education and training systems;

- o facilitating access to education and training systems; and

- o opening up EU education and training systems to the wider world.

After the Lisbon strategic goals, the Educational Council defined *benchmarks related to school education*. The Commission Staff Working Paper 'Progress towards the Lisbon Objectives in Education and Training'[21] showed, however, that the benchmarks would be difficult to achieve. A number of key messages on progress towards the specific objectives emerged. In the following, some of them are presented with comments on how these results are connected to TE:

In the EU, in 2005, about 6 million, i.e., 15 % of young people (18-24 year-olds), left education prematurely and are in danger of being on the fringes of the knowledge

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[20] See also http://ec.europa.eu/education/lifelong-learning-policy/doc/com865_en.pdf

[21] See http://ec.europa.eu/education/policies/2010/doc/progressreport06.pdf

society. The Council has agreed to reduce this rate to no more than 10 % by 2010. Although some progress has been made, the majority of Member States need to increase their efforts in coming years to help reach the EU target. The high number of early school leavers is an obstacle to securing access to the knowledge-based society and greater social cohesion in the EU.

– This is a result which also influences TE. Teachers' skills and competences, especially with regard to pedagogic as well as co-operation and collaborating competences, will be essential in supporting young people to perceive and plan their future life and educational goals for it.

Four million more adults would participate in life-long learning within any four-week period in 2010 if the EU benchmark of 12.5% participation rate was achieved. Individuals must update and supplement their knowledge, competences and skills throughout life through participation in lifelong learning. The rate of adult participation in education and training in 2005 reached 10.8% in the EU, i.e., 2.9 percentage points higher than in 2000. A part of the increase was, however, due to breaks in time series, mainly in 2003. After and before 2003 progress was only slow. The objective set by the Council of achieving a 12.5% rate of adult participation requires Member States to step up efforts and to develop an integrated, coherent and inclusive lifelong learning strategy. Best performing EU countries are: Sweden (34.7%), the United Kingdom (29.1%) and Denmark (27.6%).

– The amount of adults and mature students participating in various educational settings is continuously increasing. This sets requirements for teachers' skills and competences in applying teaching methods of andragogy and self-directed learning. Teachers should be able to pay attention to adults' specific learning requirements and utilize the fact that adults, contrary to younger students, learn more often also by reflecting the knowledge and information they receive on to their earlier experiences, for example those obtained in working life.

Most EU students are not taught at least two foreign languages from an early age, as proposed by the Barcelona 2002 European Council. In 2003, an average of only 1.3 and 1.6 foreign languages per pupil were taught in the Member States in general lower and upper secondary education respectively. In vocational programmes at upper secondary level, the average number of foreign languages taught is considerably lower. Being taught a language is, however, only the first step in the language acquisition process. To reach the objective of proficiency in at least two foreign languages, major efforts will have to be made by most countries.

- This statement indicates a need for educational policy makers of the Member States, when constructing school curricula, to guarantee that the curricula includes a sufficient amount of diverse languages for pupils to choose from. Increasing the opportunities for language learning also influences the contents of TE curricula.

Mobility of students within the Community Erasmus programme would have to more than double to reach the target of affecting 10% of the student population. The European educational space is in the making, however too few students get the opportunity to become mobile internationally.

- Teachers' skills and competences related to students' international mobility should be supported in TE. Teachers' – and also school leaders' – abilities to encourage students into international mobility are perhaps the most important means for supporting students' mobility. Students' negative attitudes to international mobility

may also be a consequence of the lack of sufficient and relevant information. Thus, teachers should have realistic knowledge and information about the opportunities for student mobility to be able to inform students about them. However, the lack of language proficiency is an important obstacle and reduces the willingness to take part in mobility initiatives[22].

Other previous findings

Generally, teachers' quality has been proved to be significantly and positively correlated with pupil attainment and this would be the most important within-school aspect explaining student performance. Its effects are much larger than the effects of school organisation, leadership or financial conditions[23]. Furthermore, other studies[24] have found positive relationships between in-service teacher training and student achievement and 'suggest that an in-service training program… raised children's achievement.. (and) suggest that teacher training may provide a less costly means of increasing test scores than reducing class size or adding school hours'.

In the terms of reference[25] a concern about the retirement of existing teachers was also mentioned. The schools – and the societies – in which these beginning teachers will develop their professional careers will be very different from the ones that they knew as pupils. In particular, in the face of more diverse societies, education systems, and more specifically schools, are now called upon to play an important role in fostering social cohesion and delivering an education where efficiency and equity go hand in hand. In addition, teachers will face a number of other challenges, such as developing a more reflective practice, taking account of new concepts of learning, tailoring their teaching to the specific needs of each pupil, nurturing learner autonomy, etc.

In the light of these concerns, the 'Teacher Education Curricula in the EU' project was started in order to provide policy-relevant advice and information in the field of school education policy, especially concerning teachers' knowledge, skills and key competences. Based on the results of this study, the concrete recommendations concerning TE policy-making and projects for future development are described in Chapter 5 and listed in the Executive summary.

2.5 TE systems in the Member states

Generally, teacher education systems in the Member States consist of teachers' initial TE, an induction phase for newly qualified teachers, also called 'on-the-job'

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[22] Study on Key Education Indicators on Social Inclusion and Efficiency, Mobility, Adult Skills and Active Citizenship (2006) Lot 2: Mobility of Teachers and Trainers. Final Report. London: European Commission.

[23] Rivkin, Hanushek & Kain (2005) Teachers, Schools, and Academic Achievement.
[4] Angrist & Lavy (2001). Does Teacher Training Affect Pupil Learning? Evidence from Matched Comparisons in Jerusalem Public Schools Journal of Labor Economics, 19, 2, 343-69
[25] See http://www.peda.net/veraja/jyu/uniservices/teacher

qualifying phase[26], and after them, teachers' in-service eduction or continuing TE or teachers' professional development.

2.5.1   Initial TE

In Member States, TE is organised in various ways, but usually it includes a general and a professional component. The general component is the part given over to courses covering general education and study of the one or more specific subjects to be taught and may also refer to the degree obtained in a particular subject. The professional part provides prospective teachers with both the theoretical and practical skills needed to be a teacher and includes in-class placements. Thus, two main models of initial teacher education can be distinguished on the basis of the way in which these two components are combined. The professional component may be provided either at the same time as the general component (*the concurrent model*) or after it (*the consecutive model*)[27].

According to EURYDICE[28], teachers' initial degree qualifications vary also with the type of school in which they will teach. Usually teachers' initial TE in the Member States is organised *at university level*, but in some countries especially pre-primary and primary school TE is arranged in the *non-university sector, usually at TE colleges or polytechnics*. Table 1 shows the length of teacher education at different school levels in the Member States.

Table 1. Teacher education in different Member States

Upper secondary teachers

- in ALL Member States, initial teacher education is at **university level** institutions (ISCED 5A);
- it lasts at least 5 years in **18** Member States: BE nl, CZ, DK, DE, EE, FR, HU, MT, NL, IT, LUX, AT, PL, PT, SI, SK, FI, UK
- it is less than 5 years in only **10** Member States (BE fr, BG, EL, ES, IE, CY, LV, LT, RO, SE)
- It lasts over 5 years in DK, DE, IT, LUX, AT

Lower secondary teachers

- in ALL countries, initial teacher education is at **tertiary level** institutions (ISCED 5)
- in MOST countries it leads to a university level qualification (ISCED 5A);
- exceptions are: BE, AT Hauptschulen (ISCED 5B)
- it lasts at least 5 years in **12** Member States: DE, EE, FR, IT, LUX, AT, PL, PT, SI, SK, FI, UK
- it is less than 5 years in **13** Member States (BG, CZ, DK, EL, ES, IE, CY, LV, LT, HU, MT, NL, RO)

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[26] Eurydice Key Data on Education in Europe (2009), p. 149. See:
http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf
[27] Eurydice Key Data on Education in Europe (2009), p. 157. See:
http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf
[28] Eurydice Key Data on Education in Europe (2005), p. 193.

<u>Primary teachers</u>

- in MOST countries, initial teacher education is at **university level** (ISCED 5A);
- in 4 countries it is at **non-university tertiary level** (ISCED 5B) (BE, LU, AT, RO).
- training last 5 years in **7** Member States: DE, EE, FR, PL FI, SI, UK
- training last 4 years in **15** Member States: BG, CZ, DK, EL, IE, IT, CY, LV, LT, HU, MT, NL, PT, SK, RO
- training last 3 years in **5** Member States: BE, ES, LU, AT, SE

<u>*The organisation of initial TE in the university sector*</u>

According to the International Standard Classification of Education ISCED[29] (1997) classification, Education as a university discipline is divided into two broad but closely linked fields, Teacher Education and Education Science. ISCED was designed by UNESCO in the early 1970's to serve 'as an instrument suitable for assembling, compiling and presenting statistics on education both within individual countries and internationally'. The ISCED classification from the Section 'II Broad Groups and Fields of Education' is as follows:

Education: 1) Teacher training and 2) Education Science

> **Teacher training** for pre-school, kindergarten, elementary school, vocational, practical, non-vocational subject, adult education, teacher trainers and for handicapped children. General and specialized teacher training programmes.
> Note: In this report 'teacher education' is used instead of the term 'teacher training'.

> **Education science**: curriculum development in non-vocational and vocational subjects. Educational assessment, testing and measurement, educational research, other education science.

The Bologna Process (BP) is an intergovernmental reform process, aiming at the creation of an integrated European Higher Education Area (EHEA) by 2010. This reform concerns all universities and higher education institutions as well as all university degrees, including teacher education and training degrees. [30] [31]

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[29] See: http://www.unesco.org/education/nfsunesco/doc/isced_1997.htm

[30] Gonzales, J. & Wagenaar, R. (eds.) (2005) *Tuning Educational Structures in Europe. II. Universities' Contribution to the Bologna Process.* Bilbao/Groningen: University of Deusto / University of Groningen, 75-93.

[31] See also Niemi, H. (2008a). The Bologna Process and the teacher education curriculum. Portuguese Presidency of the Council of the European Union Conference 'Teacher professional development for the quality and equity of life-long learning' Lisboa, 27-28 September 2007 Lisbon : Ministry of Education of Portugal, Directorate-General for Human Resources in Education, 50-67.

Typically, the BP defines 3 cycles/levels of degrees:

1st level = Bachelor (~ 180 ECTS) [32]
2nd level = Master (~ 90 – 120 ECTS)[33]
3rd level = Doctor (~ 360 ECTS).

However, the credits vary within the levels in different Member States. Gonzales & Wagenaar (2005)[34] have listed typical university degrees offered in TE in different BP cycles (Table 2).

Table 2. Typical degrees (according to the BP) offered in Teacher Education

Cycle	Typical degrees offered
First Cycle	Programmes for the preparation of pre-school, primary and secondary school teachers, and teachers from other sectors, including Education Sciences, subject-specific and/or domain specific pedagogical studies appropriate to the target learning domains, and an element of supervised teaching practice in the target domain, the length of which varies across the EU.
	Students also normally study one or two academic disciplines either concurrently with (more often in pre-school/primary/ secondary) or prior to (more often in secondary) the Education component of the programme.
	All secondary school teachers must be educated to first degree level in their chosen teaching subject, and this may be prior to the teacher education element, as in the consecutive teacher education model of a degree followed by a one-year intensive education programme, such as is found in the U.K., Ireland and Spain.
	In some countries, teachers must be educated to second cycle level in order to be awarded Qualified Teacher Status, e.g. Finland.
	In others primary and pre-school teachers may be educated to sub-first degree level initially.
	The trend, however, throughout Europe is towards an all-graduate teaching profession at all levels of the Education sector.

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[32] *The European Credit Transfer System (ECTS)* is based on the principle that 60 credits measure the workload of a full-time student during one academic year. The student workload of a full-time study programme in Europe amounts in most cases to around 1500-1800 hours per year and in those cases one credit represents around 25 to 30 working hours.

[33] In Finland, almost all study programmes require 120 credits for a Master's degree.

[34] Gonzales, J. & Wagenaar, R. (eds.) (2005) *Tuning Educational Structures in Europe. II. Universities' Contribution to the Bologna Process.* Bilbao/Groningen: University of Deusto / University of Groningen, 75-93.

Second Cycle	A wide range of specialist programmes of continuing professional development are offered in Teacher Education, often leading to a Master's degree, but sometimes offering mid-points of completion at Diploma level.
	Second cycle study normally allows professionals to specialize further in their chosen fields or to obtain a qualification in a new area - e.g., a graduate in (pure) Mathematics (1st cycle) continues (2nd cycle) to become a teacher of Mathematics.
	Typical second cycle degrees in Teacher Education include, among others: Special Needs Education, Nurse Education, didactics related to specialist subjects in the curriculum, Teaching and Learning in Higher Education, Adult Education, Guidance and Counseling.
	Most second cycle programmes have a strong taught component, supported by an empirically and/or theoretically based thesis or dissertation which accounts for the final third (or more) of the programme.
	The taught component may include the development of professional skills such as systematic observation, testing, diagnosing and counseling, as well deepening or extending of knowledge and understanding.
	In many countries a wholly research-based second cycle degree is available, often, but not always, linked to third cycle study.
Third Cycle	Doctorate by research, usually requiring examination and defence of a substantial and original piece of research at an international level of excellence described in a comprehensive thesis.
	There is an expectation in many countries that part of the earlier years of study will comprise a taught element associated with the development of research knowledge and skills and the practical design of a research project for the empirical and/or theoretical element of the degree.
	In a few countries (Denmark, Portugal, Ireland, UK) a new form of doctoral degree has been, or is being introduced, with a strong professional focus.
	These professional doctorates include an assessed component of advanced subject study and a thesis based on original research similar to, but shorter than, the doctorate by research.

The EURYDICE document 'Key Data on Education in Europe 2009[35]' provides a comprehensive description of the current situation concerning Bologna Process cycles implemented in TE.

Initial TE in the non-university sector

Initial TE for even pre-primary level (ISCED 0) occurs in most Member States at tertiary level. However, in some countries primary school teachers get their degrees from TE colleges or polytechnics. In these cases the emphasis in TE has been more on occupational than academic contents. In Belgium, Luxembourg, Austria and Romania, initial TE for this level occurs solely at occupationally-oriented tertiary level (ISCED 5B). The one exception is Romania, where teacher shortages have prompted the reintroduction of a teacher education programme at upper secondary level alongside a tertiary level programme. [36]

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[35] See: http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

[36] Eurydice Key Data on Education in Europe (2009), p. 151-153, See: http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

There are also countries where it is possible to gain certification by completing TE in-service courses besides teaching as an unqualified teacher. This option concerns especially those teachers who seek a university degree instead of a lower-level teaching degree or being unqualified.

2.5.2 Induction

According to EURYDICE[37], a final 'on-the-job' qualifying phase, induction, has been introduced in slightly less than half of all European countries, including non-Member States. The main aim of the induction phase is to facilitate support for teacher trainees and to introduce them to their new working environment. This compulsory period forms a transition from initial teacher education to fully-fledged professional life. It should help teacher trainees to become successful teachers and thus to prevent new teachers from leaving their jobs. During this phase, teachers are still not considered to be fully qualified and are usually regarded as 'candidate teachers' or 'trainees'. They carry out wholly or partially the tasks incumbent on fully qualified teachers, and are remunerated for their activity. This phase includes an important supportive and supervisory dimension provided by a 'mentor', and normally also a formal evaluation of teaching skills. It also includes formal theoretical training. In most cases, candidate teachers become fully qualified teachers at the end of this stage after satisfying a set of formal evaluation criteria.

2.5.3 Teachers' in-service education

As a result of rapid changes in the requirements of working life, staff training has, in the last few years, become increasingly important both in private companies and in the public sector. Changes in society call for changes also in schools and are thereby reflected in the work of teachers as well. This has, in turn, increased the importance of, and need for, in-service training for teaching staff, which poses a major challenge to in-service TE. Teachers' basic subject and pedagogical skills and competences have to be taken into account in initial TE. As stated in the European Commission Communication, initial TE cannot provide teachers with the knowledge and skills necessary for a life-time of teaching. In addition, the skills and competences required of teachers will continuously change and those that are missing or inadequate must be given careful attention when planning teachers' in-service education.

According to EURYDICE[38] teachers' in-service education, called 'continuing professional development' (CPD) is among the professional duties of teachers in over half of all European countries, including non-Member States. For example, while CPD is a professional duty in France, the Netherlands, Sweden, Iceland and Norway, participation in it is in practice optional. In Spain, Luxembourg, Poland, Portugal,

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[37] Eurydice (2009) Key Data on Education in Europe, p. 157
http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

[38] Eurydice (2009) Key Data on Education in Europe, p. 160
http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

Slovenia and Slovakia, CPD is optional, but clearly linked to career advancement and salary increases. In Spain and Luxembourg, teachers who enrol for a certain amount of training are eligible for a salary bonus. In the other four countries, credits may be acquired via participation in CPD programmes and are taken into account for purposes of promotion. Specific CPD linked to the introduction of new educational reforms and organised by the relevant authorities is in general a professional duty for teachers in all countries.

According to the results of several research projects[39], teachers' in-service education in most European countries is planned and organized in a very heterogeneous way (see above), and the contents, skills and competences required of teachers during their teaching career have not been taken into consideration as well as they should.

One example of research projects concerning teachers' in-service education is a recent Finnish study[40] which has revealed several important challenges for organizing teachers' in-service education for the future. These challenges can be seen as general challenges facing teachers in different cultures who have received their initial TE in a fairly comparable way, at university level. First of all, when defining the content areas the focus should be on a new kind of teachership, while also considering various aspects pertaining to the learning of different student groups. Furthermore, teachers' in-service education should be the focus of careful consideration and long-term planning both at school/macro level and at individual teachers'/micro level[41].

In general, teachers should be encouraged more actively to take a wider look at their own professional development and see it as a part of broader, life-long learning. From the viewpoint of life-long learning, initial and in-service TE should form a continuum[42] where teaching staff would receive continuing education throughout their careers until retirement. Overall, initial teacher education lays the foundation for a teacher's work, but in-service education should support this work in all possible ways throughout the teaching career. As said in the Commission Communication (Section 2.3.1), 'provision for teacher education and development will be more effective if it is coordinated as a coherent system at national level, and is adequately funded. The ideal approach would be to set up a seamless continuum of provision embracing initial teacher education, induction into the profession, and career-long

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[39] Loima, J. (Ed.) (2008). Facing the Future – Developing Teacher Education. Helsinki: Gaudeamus.

[40] Piesanen, E., Kiviniemi, U. & Valkonen, S. (2006). Follow-up and evaluation of the teacher education development programme 2005. Continuing teacher education in 2005 and its follow-up 1998-2005. University of Jyväskylä. Institute for Educational Research. Research reports 29. (English abstract.) Internet: http://ktl.jyu.fi/ktl/julkaisut/luettelo/2006/g029

Piesanen, E., Kiviniemi, U. & Valkonen, S. (2007). Follow-up and evaluation of the teacher development programme. Continuing teacher education in 2005 and its follow-up 1998 2005 by fields and teaching subjects in different types of educational institutions. University of Jyväskylä. Institute for Educational Research. Research reports 38. (English abstract, see http://ktl.jyu.fi/ktl/julkaisut/luettelo/vuosi_2007/g038)

[41] Piesanen et al. (2006)

[42] See e.g. Niemi, H. (2008b). Research-based teacher education for teacher's life-long learning. In Life-long Learning in Europe 1/2008, 61-69.
See also the Commission Communication (2007).

continuing professional development that includes formal, informal and non-formal learning opportunities'.

3 IMPLEMENTATION OF THE STUDY

3.1 Objectives and outputs

According to the Terms of Reference concerning the contract for the 'Teacher Education Curricula in the EU' project, the objectives of theproject are divided into two sections:

I Specific objectives of the contract were as follows (items 1 and 2 are discussed in Section 4, item 3 in Section 5):

1. To assess the extent to which current provision for initial and in-service Teacher Education provides teachers with the knowledge, skills and competences set out in the list subsequently agreed with the Commission.
2. To provide the Commission with a systematic and comparative overview, highlighting areas of good Teacher Education policy in these areas;
3. On the basis of these analyses, to draw conclusions on the best Teacher Education policies and make recommendations for further action.

II Outputs to be achieved by the contractor

1. An assessment of how the current situations measure up against the proposals contained in the Common European Principles for Teacher Competences and Qualifications[43] (which were subsequently amended by agreement between FIER and the Commission); (See Section 5 'Conclusions')
2. Proposals and recommendations for further action. (See Section 5.2 'Recommendations')
To achieve the objectives, the following **research questions** were used as a tool to enable the gathering of information to answer the above-mentioned questions posed in the contract:
> (1) How has TE been organized and documented in each EU country?
> (2) What kind of skills and competences are mentioned in the curricula and other documents concerning TE in the EU countries?
> (3) How has the /initial TE/ induction phase/in-service education/ further education/ continuum been taken into consideration in the curricula and other documents of the EU countries?
> (4) To what extent do the TE curricula of the EU countries provide teachers with the knowledge, skills and competences referred to in the above-mentioned EC documents?

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[43] See: http://www.see-educoop.net/education_in/pdf/01-en_principles_en.pdf

3.2   Method and data collection

This research project proceeded *inductively*. The inductive approach means that there have been series of findings concerning the contents of TE curricula and other TE documents from different Member States. Based on these findings, the further steps in the study were taken. For example, the preliminary document data analyses revealed the existence of a variety of TE documents, a partial lack of TE curricula and, as a whole, the very heterogeneous nature of the data which it was possible to obtain from the documents. This was taken into consideration when planning the structure of the questionnaire and the themes of the interview: they should also include items which could reveal the structure of the TE system more specifically as well as the context that teachers' skills and competences have been taken into consideration when planning TE in each country.

The nature of the study also meant that certain phases overlapped with each other. The analysis of the data was a continuous process with the aim of obtaining as valid data as possible. This also served as quality assurance of the study.

3.3   Phases of the study

The study has been carried out through three main phases: 1) Inception phase, 2) Empirical data collection phase and 3) Reporting phase.

Inception phase in a nutshell:
- Preparing the inception report in February 2008, approval March 2008.
- Preparing the web page of the project by UniServices Ltd.
- Creating the network consisting of TE experts from different levels in all Member States. (Annex 4.)
- Gathering the document data from different databases[44] and from the network. (Annex 12a.)
- Collecting responses from the network to some preliminary questions concerning TE and TE curricula and other documents.
- Making decisions about the continuation of the project especially with the discovery of possible problematic issues (e.g. missing data, translations) in analysing the existing data.
- Analysing the existing curricula and other documents of the Member States from the viewpoint prescribed by the EC: Knowledge, skills and key competences referred to in the Commission Communication mentioned in the introduction to this report. (Annex 12a.)
- Decisions on and approval of the final research plan.
- Preparing the interim report by 18th June, 2008, approval August 2008.

Empirical data collection in a nutshell:
- Formulating the questionnaire (Annex 1.)
- Implementing the data collection with the questionnaire

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[44] Internet databases of OECD, EURYDICE and INCA and in addition, the reports (I-IV) of a recent project 'The Extent and Impact of Higher Education Curricular Reform across Europe' concerning, among others, TE curricula reforms in different Member States.

- Selecting the case countries
- Selecting the interviewees
- Making the interviews
- Analysing the interview data (Annex 19.)

Reporting phase in a nutshell:
- Combining the results of the questionnaire and interview data
- Writing the final report, getting comments on the drafts from the EC and the supervisors
- Getting feedback from the members of the network to validate the data concerning certain countries mentioned in the report
- Revising the final report according to the feedback
- Sending the draft of the final report to the Commission by 19th August 2009, getting feedback on 2nd October 2009 and sending the final report to the Commission by 15th December 2009[45].

3.4   About the data collection

Creating the network

One of the very first research tasks was to create the TE expert network (Table 3). The aim was to receive TE experts from each Member State from different levels; from Ministry level, from University level, from TE institution level and/or from other levels involving in organising, planning or implementing TE in the country. In creating a new network of over 100 TE experts from all 27 Member states for the purpose of this study, very efficient use was made of the existing TE networks of different kinds of organizations (ATEE, TEPE, EURYDICE) as well as of FIER's own connections (OECD's PISA contacts, ELGPN network, IEA's TIMSS, etc.)..

Table 3. The number of contact persons by country[46]

Country	Number of contacts
Austria	9
Belgium Flemish	3
Belgium German	2
Bulgaria	1
Cyprus	2
Czech	3
Denmark	1
Estonia	4

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[45] According to the initial contract between EC and FIER, the project would end by 18th June 2009. After receiving an extension of 90 days from the Commission, the project was to end on 19th September 2009 and the draft final report submitted to the Commission by 19th August 2009. After the Commision's feedback from the draft, the dedline for submitting the revised report was accepted to be on 15th December 2009.

[46] The numbers also include those contact persons who did not want to be mentioned by the name in the list (Annex 9).

Finland	6
France	3
Germany	3
Greece	2
Hungary	5
Ireland	2
Italy	9
Latvia	4
Lithuania	4
Luxemburg	2
Malta	1
Netherlands	2
Poland	3
Portugal	2
Romania	4
Slovakia	1
Slovenia	1
Spain	9
Sweden	1
UK England	1
UK Scotland	7
Total	97

All the respondents of this new network were leading TE experts in their own country. Those contact persons who did not consider themselves experts in the field, provided further contacts. As the members of the network represented different actors in the TE field, it should be noticed that the perspective they contributed to the project and from which they assessed the TE situation in the country varied. The representatives from the Ministry level spoke more from the official point of view whereas others more from their own point of view.

Life-long learning perspective

Because the life-long learning perspective of TE is emphasized in the EU texts and because this perspective is of great concern in any attempt to understand the outcomes of this study, information was also recorded about the TE continuum (initial TE, induction phase and in-service training) and about teachers' possible career development (e.g. different levels of teachership, leadership training). This data clarifies, for example, the great diversity in teacher's qualifications. (See Annex 1, the questionnaire.)

Thus, when planning the questionnaire data collection, it was important to obtain answers also to these questions:
- Does the university degree qualify teachers directly or is some kind of probation time needed for a fully authorised teacher's permit?
- Which level (ministry level, regional, institutional level) is responsible for TE curricula and competences?
- What is the balance between theory and practice in TE?
- Who is responsible for organizing a possible induction phase for newly qualified teachers and teachers' in-service TE?

- Who decides what contents are taught in these phases?
- Should the newly qualified teacher master all the key competences and skills in her/his initial teacher training or should teachers' knowledge, competences and skills be updated throughout the career?
- How is initial TE organised and does it follow the Bologna Process?
- Do newly qualified teachers (NQT) have a probation period?
- How has the induction phase been taken in consideration?
- How has teachers' in-service education been organized?

To ensure the reliability, the accuracy and the comparability of the data from different countries, questionnaire data collection was carried out after analysing the document data. Although the questionnaire data was based on the respondents' opinions, this information gave additional value to the results of the research project and made the information more comparable between Member States. After collection of the questionnaire data, it was compared with the data analysed from curricula and other related documents.

A variety of data ensures the reliability and the validity of a study. In this study document data combined with questionnaire and interview data together made it easier to form an overall picture of the TE system in the Member States and teachers' skills and competences mentioned in various kinds of documents, including TE curricula – even if this picture still remained in some cases partly controversial. In these cases the role of the network TE experts was important.

3.5   Teachers' skills and competences in EU documents

The following two EU documents described below form a background to the study and are utilised partly as bases for the competence groups used in the study. These documents describe both generally the skills and competences required for teachers and, in addition, mention some single competences.

EC document 'Common European principles for teacher competence and qualifications (2005)':

A paper entitled 'Common European principles for teacher competence and qualifications', published in 2005, serves as a background document for the Commission communication 'Improving the quality of teacher education' (Annex 1) [47]. The Common European principles should be seen as a tool to support the development of policies on teacher education at a national or regional level, as appropriate. They should provide an impetus for developing policies which respond to the level and scope of the challenges faced by the European Union and which will enhance the quality and efficiency of education across the Union.

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[47] In some countries, e.g. Luxembourg, this former EU document has also been in use in the TE developing process of the country.

Briefly, in this document, the common principles for teacher competence and qualifications were:

A graduate profession: all teachers would be graduates from higher education institutions or their equivalents. Every teacher should have the opportunity to continue their studies to the highest level in order to develop their teaching competences and to increase their opportunities for progression within the profession.

A profession placed within the context of lifelong learning: teachers' professional development should continue throughout their careers and should be supported and encouraged by coherent systems at national, regional and/or local level, as appropriate. They should recognise the importance of acquiring new knowledge, and have the ability to innovate and use evidence to inform their work.

A mobile profession: mobility should be a central component of initial and continuing teacher education programmes. Teachers should, therefore, be encouraged to undertake mobility in other European countries for professional development purposes. There should also be the opportunity for mobility between different levels of education and towards different professions within the education sector.

A profession based on partnerships: institutions providing teacher education should work collaboratively in partnership with schools, industry, and work-based training providers. Teachers should be encouraged to review evidence of effective practice and engage with current innovation and research in order to keep pace with the evolving knowledge society. Teacher education, in itself, should be an object of study and research. These common principles ensure the attractiveness and status of the teaching profession.

Making it work: the key competences

Teaching and education should be seen in their broadest sense. They add not only to the economic but also to the cultural aspects of the knowledge society. Teachers should, therefore, be able to work effectively in three overlapping areas.

According to the Common Principles, teachers should be able to
• work with information, technology and knowledge;
• work with their fellow human beings – learners, colleagues and other partners in education; and
• work with and in society - at local, regional, national, European and broader global levels.

Teachers' work in all these areas should be embedded in a professional continuum of lifelong learning and their qualifications and achievements should be understood within the European Qualifications Framework. The development of professional competences should be viewed over the continuum of professional life. Not all teachers leaving their initial teacher education should be expected to possess all of the necessary competences; some of them will be included in induction and in in-service TE.

'EC document 'Improving the Quality of TE (2007)'':

The Common European Principles for Teacher Competences and Qualifications, referred to above, were written on the basis of the experience of teachers and teacher educators across Europe and validated by stakeholders. It describes a vision of a European teaching profession that has the following characteristics:
- it is a **well-qualified** profession: all teachers are graduates from higher education institutions (and those working in the field of initial vocational education are highly qualified in their professional area and have a suitable pedagogical qualification). Every teacher has extensive subject knowledge, a good knowledge of pedagogy, the skills and competences required to guide and support learners, and an understanding of the social and cultural dimension of education.
- it is a profession of **lifelong learners**: teachers are supported to continue their professional development throughout their careers. They and their employers recognise the importance of acquiring new knowledge, and are able to innovate and use evidence to inform their work.
- it is a **mobile** profession: mobility is a central component of initial and continuing teacher education programmes. Teachers are encouraged to work or study in other European countries for professional development purposes.
- it is a profession based on **partnership**: teacher education institutions organise their work collaboratively in partnership with schools, local work environments, work-based training providers and other stakeholders.

Single teachers' skills and competences mentioned in the EU document 'Improving the Quality of TE in the EU' and in the related Council Conclusions'[48]

The original skills and competences that are mentioned in these EC texts and the subject of this study are:

- managing knowledge;
- building and managing learning environments;
- integrating ICT effectively into learning and teaching;
- matching a range of teaching and learning strategies to the evolving -needs of individual learners;
- encouraging intercultural respect and understanding;
- working effectively with the local community and stakeholders;
- contributing to systems of quality assurance;
- co-operating and collaborating with colleagues,
- learning from their own experiences; innovating and using evidence to inform their work;
- reviewing evidence of effective practice and engaging with innovation and research;

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[48] The Commission Communication 'Improving the Quality of TE (Brussels, 3rd Aug. 2007) (http://ec.europa.eu/education/com392_en.pdf) (Annex 1)
The related Council Conclusions (Brussels, 26th Oct. 2007) (http://register.consilium.europa.eu/pdf/en/07/st14/st14413.en07.pdf) (Annex 2)

- European languages (from the Commission Communication 'Improving Quality of Teacher Education')
- supporting autonomous learning
- supporting lifelong learning (from Council Conclusions)
- level of qualifications for entry to the teaching profession: Higher Education qualification;
- VET: highly qualified in professional area and holding suitable pedagogical qualification-
- research-based education
- balance of study / practicum
- balance of subject knowledge / pedagogical skills
- leadership development
- teaching heterogeneous classes
- teaching transversal competences
- promoting a safe, respectful school environment
- autonomous learner
- reflective practice

To be able to gain a common understanding of the skills and competences, the above mentioned competences were clustered into 8 groups (Table 4). The purpose of the clustering was to form groups from a large amount of single skills and competences which teachers need in their everyday work. These groupings should also be as extensive as possible and at the same time sufficiently understood in the same way in different countries.

To increase the reliability and validity of the study and to gain a common understanding of skills and key competences in TE curricula and other TE documents, the clusters were described using certain main skills and competences. This was necessary because the definitions of the concepts used in the documents seemed to vary in different countries and in different TE cultures. The same skills and competence groups were used both in the questionnaire and as the themes of the interviews.

Table 4. Skills and competence clusters used in the study[49]

1. **Subject competence**, e.g.
   - managing, structuring and restructuring subject knowledge
   - integrating subject knowledge and pedagogic skills
   - applying constructive strategies in subject knowledge processing
2. **Pedagogic competencies,** e.g.
   - employing a range of teaching and learning strategies
   - supporting students' autonomous learning
   - using diverse teaching methods
   - stimulating students' socio-emotional and moral development

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[49] In addition to these, one of the clusters could have been **'Promoting citizenship'** - skills and competences concerning teaching the theory and practice of active citizenship or citizenship education. This subject has been included in the curricula of schools and in TE in many countries. However, in the EC's Communication 'Improving the Quality of TE' there is no mention of citizenship education in schools or in TE.

- encouraging multicultural respect and understanding
- teaching heterogeneous classes
- guiding and supporting learners

3. **Integrating theory and practice,** e.g.
- integrating study and practicum
- using research-based learning
- using guided teaching practice
- learning about the acquisition of information and development of knowledge
- supporting research orientation
- carrying out research

4. **Co-operation and collaboration,** e.g.
- between students, colleagues, parents and schools
- working effectively with the local community, with work-based training providers and stakeholders,
- supporting communication skills
- using collaborative learning methods
- promoting a safe, respectful school environment

5. **Quality assurance,** e.g.
- understanding and applying the principles of assessment
- contributing to systems of quality assurance
- using the results of assessment to evaluate and improve teaching and to improve standards of attainment

6. **Mobility,** e.g.
- supporting students' and teachers' European and international contacts
- encouraging student exchange
- learning and using European languages
- learning and understanding different (European) cultures

7. **Leadership,** e.g.
- supporting leadership competences so as to develop the institution and the learning environment
- collaboration between institutions and communities
- regional collaboration
- staff development
- strategic, pedagogic and economic leadership
- encouraging teachers to career development

8. **Continuing and Lifelong Learning,** e.g.
- supporting and preparing students for lifelong learning
- understanding the importance of self-development in continuing their professional development throughout their careers

Note: Using clusters of competences instead of single skills and competences gave some advantages, e.g. improving the common understanding in different Member States, preventing to some extent overlapping and helping data collection by using only a few concepts in the questionnaire and in the interviews. The disadvantage of using this approach was that some concepts of the original list of competences were lost in the analyses.

Reliability of the study

Because the process of making decisions and converting changes and specifications into TE curricula or other TE documents is time-consuming and gradual, and because *in most countries the process of improving TE is still going on*, the proposals made by the European Commission and the actions agreed by Ministers of Education have not yet been fully implemented. Therefore, it would be very useful for all actors *to continue to research the developing process to produce more relevant and reliable information about the situation.* According to this study, one of the main recommendations is that *it is obvious and essential to continue the work of the Commission to help Member States to improve the quality of TE. The discussion that the Commission has raised, is the only way of striving to influence the TE situation in the Member States.*

However, comparison between countries proved to be to some extent difficult because there were some countries unable to provide sufficiently comprehensive documents, let alone TE curricula. In addition, the information received from different sources was in some cases partly contradictory, which was most probably due to the fact that the information in the databases has not been updated regularly. Especially in these cases, it was rewarding and valuable to have an opportunity to obtain information from the contact persons and interviewees, and to trust their expertise.

As transparency and accessibility of official documentation has been a common aim in policy making, there seems to be an obvious need to improve the quality and transparency of Member States' documentation of their TE systems and curricula. This situation is also a challenge for the further development of TE in the Member States.

Thus, the research method in this study has proved to be very useful when carrying out a project of this kind, where it is not possible to collect data that could be statistically generalized to the population of TE, teacher trainers or teacher students. Nowadays, however, it is quite usual to combine both quantitative and qualitative methods[50][51]. Each of the methods used - documents, responses from members of the network, questionnaire data and interviews - has validated the combined results of the project. Nevertheless, the methods used in this study could also be utilized separately:

- The document data represents the official publications concerning legislation, regulations, etc., or it can be the result of other studies, e.g. the work of EURYDICE.

- The responses from the network of TE experts gave more actual and current information, which often goes beyond the documented data.

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[50]See e.g. Murray, T.R. (2003) Blending Qualitative & Quantitative research methods in theses and dissertations. Thousand Oaks: Corwin Press.

[51] For 'triangulation', see also Cohen, L. & Manion, L. 1986. Research Methods in Education. London: Croom Helm.

- Questionnaire data collection is an economic way to collect and analyse a large amount of data. Quantitative data collection[52] [53]is also the only appropriate way to get statistically generalized data if the amount of respondents is sufficient. In TE studies, this kind of method would be useful if questionnaires were sent, for example, to teacher trainers or teacher students. In this study the questionnaire data was gathered to validate the data obtained by other methods.

The questionnaire used in this study also proved to be quite relevant and adequately provided answers to the research questions in this type of study. However, if the questionnaire is used later, there are some items which should be revised. When carrying out further TE studies, the questions concerning the TE system in different Member States would be useful in collecting the same kind of information from different countries.

- Finally, interviews are the most reasonable and efficient way to get qualitative, descriptive data for many kinds of study configurations[54]. In this project the case studies carried out by interviewing TE experts from different levels, in different countries, gave a broad picture of the TE situation in these countries. This method proved to be very useful and productive in terms of results, although it was financially the most expensive method used. The interview data gathered for this study also included a lot of information which could not be utilized. Therefore, it would be most desirable to be able to study the interview data more carefully from some other aspect not taken into consideration in this study, and to write one or more articles, even in collaboration with some of the interviewees.

The use of different kinds of data increases the reliability and the validity of a study. In this study it has been important to use this method because different sources have given different perspectives on the TE situation in the countries. In the end the TE experts of the network were able to offer invaluable assistance in producing a coherent picture of the TE situation in their country.

Using 'member checking', i.e., giving the information gathered to the respondents involved for assessment, also increases the reliability of the study. In this study member checking has been used in evaluating the descriptions of the case studies. The interviewees were given the opportunity to correct mistakes or misunderstandings which might have been included in the descriptions. Member checking proved to be a good choice and very useful in assuring that the text does not include any contradictory or incorrect information, thus avoiding mistakes and misunderstandings.

3.7   Description of the empirical data

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[52] See also http://e-articles.info/e/a/title/QUANTITATIVE-DATA-ANALYSIS/
[53] See Rose, D. & Sullivan, O. (1996) Introducing Data Analysis for Social Scientists. Buckingham: Open University Press.
[54] See Patton, M.Q. (2002) Qualitative research & evaluation methods. Thousand Oaks (CA): Sage.

When teachers' knowledge, skills and competences are considered, the official documentation was very heterogeneous and limited, partly due to the fact that many countries were in the middle of renewing their TE and HE processes. This was one reason to make use later of the key competences and skills questionnaire in reference to the Commission Communication 'Improving the Quality of TE' and in the related Council Conclusions.

Generally, the main purpose of *the questionnaire data collecti*on was to obtain additional information concerning TE in each country and to validate the results of the document data analyses and in this way to improve the quality of the research. The target group was gathered from the members of the network established for the research project. The final questionnaire was formulated on the basis of the data consisting of documents, personal conversations and interviews.

The questionnaire data consisted of 31 responses from 21 countries, so six Member States were not represented in the responses to the questionnaire although an additional request was sent to them three times after the first request. Originally, the questionnaire was sent to 72 contact persons, which can be regarded as a kind of a purposeful sample. Thus, the results of the questionnaire data are not a statistically reliable representation of the TE situation in all Member States, but give a good general picture of the situation based on these 31 respondents' opinion. Some of the responses were given jointly in co-operation with two or more TE experts in the country.

Most of the respondents were from universities, slightly over a quarter from the Ministry level and the rest from TE institutions or elsewhere. As far as the institution of the respondents was concerned, the distribution was also reflected in the point of view they adopted in answering the questions. (Figure 1.)
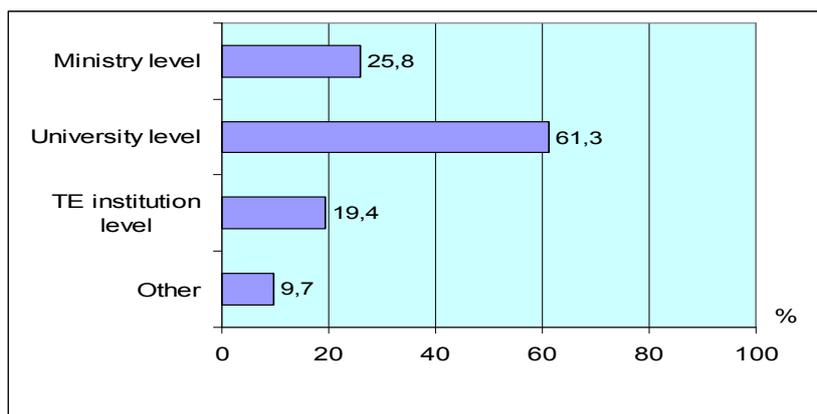

Figure 1. The respondents' organisation in the questionnaire data[55]

[55] It must be noted that in some countries TE institutes have the status of university or college, in some countries TE institutes are under some faculty of a university which has TE in its programme, e.g. at the University of Jyväskylä, the Department of TE operates under the Faculty of Education and the decisions made in the Department must be accepted in the Faculty.

Selecting the case countries and preparing the interviews. From the document data analysis it was noticed that the TE and TE curricula situation varies from country to country. To gain a more thorough understanding of the TE curricula and of TE systems in some countries and to validate the results of the questionnaire it was planned to carry out case studies in selected EU Member States. The implementation of the case studies was based on the results of the document analyses. This applies to both the method of collecting the data and the number of countries selected to be the cases. Some general criteria served as the basis for selecting the countries. These criteria were based on the models that different countries have used to organise their TE. The following criteria were used in the selection for the case studies:

1) Differently organized TE systems (centralized ministry level steering versus institutional autonomy)
2) Differently organized TE systems as far as the life-long learning perspective of TE is concerned (initial, induction/probation, in-service training)
3) The way teachers' skills and key competences have been taken into consideration in TE curricula and other documents
4) Interesting countries in respect of TE policy making
5) Differently organized TE systems in terms of the Bologna Process
6) Large countries versus small countries
7) Older Member States versus new Member States
8) Countries which geographically cover the EU
9) TE in reform
10) Good practices

One of the prerequisites for selection was also TE experts' willingness to co-operate and assist in the research project. After considering the criteria the following case countries were selected:

1)   Catalonia (as a part of Spain)
2)   Estonia
3)   Finland
4)   France
5)   Italy
6)   Romania
7)   Scotland (as a part of the UK)

The initial intention was to have 4 - 6 case countries, approximately 3 - 4 interviews per country from different levels, each lasting some 1½ hours. In the end, there were a total of 38 interviews, 3 – 6 interviews in each case country. It should be noted that each interviewee represented herself/himself, thus the opinions and views were their own, not the 'official' opinions of the organization or institution or policy makers, etc. (see Table 5).

The interviews were carried out with a semi-structured interview method for the sake of consistency and reliability. The main themes of the interviews are presented in Annex 2. The interviews were undertaken in various TE organisations (see Table 5).

Before submission of the final report, the drafts of the descriptions concerning each case study were sent to the contact persons for verification and validation and revised according to their comments.

Table 5. Interviews in the case countries

	Interviewees	**Organisation**	**The main selection criteria (see above)**
Catalonia (as a part of Spain)	3 5 1	• Ministry • University • TE Institution	1 (diff. TE system) 3 (s&c)
Estonia	1 2	• Ministry • University	6 (small M.S.) 2 (ind.) 10 (good pract.)
Finland	3 2	• Ministry/Finnish Board of Education • University	4 (intr. TE policy) 10 (good pract.)
France	2 1	• University • Educational institution	5 (diff. BP) 7 (old M.S.) 9 (reform)
Italy	7	• University	4 (intr. TE policy) 5 (diff. BP) 10 (good pract.)
Romania	2 2	• Ministry • University	2(diff. ini,ind,ins) 7 (new M.S.) 10 (good pract.)
Scotland (as a part of the U.K.)	1 6	• Ministry • University	1 (diff TE system) 3 (s&c)
Total	38		

The completed descriptions of the case studies are presented in Annex 8 and the summaries in Chapter 4 of this report.

4 TEACHERS' SKILLS AND COMPETENCES IN TE DOCUMENTS IN THE EU COUNTRIES[56]

According to the Terms of Reference concerning the contract of the 'Teacher Education Curricula in the EU' project, the specific objectives of the contract were:

1. To assess the extent to which current provision for initial and in-service Teacher Education provides teachers with the knowledge, skills and competences set out in the list subsequently agreed between the Commission and FIER.
2. To provide the Commission with a systematic and comparative overview, highlighting areas of good Teacher Education policy in these areas.
3. On the basis of these analyses, to draw conclusions on the best Teacher Education policies and make recommendations for further action.

To obtain background information about TE systems, the questionnaire and the preliminary questions addressed to contact persons included items concerning the first three research questions (see Section 3). The research questions were used as a tool to obtain background information about the organisation of initial TE, mobility, induction and teachers' in-service education. One of the interview themes also concerned these issues.

Although this information on different Member State's TE systems was also partly available in various databases (e.g., EURYDICE, OECD, INCA), it nevertheless seemed appropriate to also collect this information as it functions as a frame of reference for this study. It should also be noted that although the information obtained from some of these databases was comprehensive, it was partly out of date[57]. This is due to the continuous changes and reforms happening in TE in all European countries. In some countries the process has proceeded rapidly, in some more slowly and in others it is just at the beginning. For these reasons, it was extremely important to get more updated information from the network experts of this study. In this connection, there was also a focus on the level at which TE curricula and other TE documents have been generally defined.

4.1 Definition of teachers' skills and competences

This section will offer a response to two main research questions:

- What kind of skills and competences are mentioned in the curricula and other documents concerning TE in the EU countries (e.g. the definition of competences)?
- To what extent do the TE curricula of the EU countries provide teachers with the knowledge, skills and competences referred to in the above-mentioned EC documents (e.g. How important are different competences in primary and secondary school TE curricula? To what extent have different competences been determined

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[56] The main results from different sections are presented in summary form in the boxes at the end of the sections.

[57] This also applies to the summaries of the document data (Annex 3a).

and taken into consideration at different levels? How have different competences been taken into consideration when planning primary school TE and when planning the secondary school TE)?

The following results are based on the entire available data of this study, namely, the document data and the responses from the network received by email as well as the questionnaire and interview data in the case countries. If a particular result is based only on one set of data, and this is highly meaningful when interpreting the results, this is mentioned separately.

The material obtained from network contacts and from the Internet as well as from the publications of the Member States gives a multifaceted picture of the TE situation and its documentation, and mirrors the diverse situation in the countries and the accuracy with which it has been recorded. In addition, the EURYDICE database gave only very little and limited information about teachers' skills and competences in the TE of the Member States. Also the concepts and definitions used vary country by country. For this reason the questionnaire and case studies were of great importance in increasing the validity of the study. Similarly, the contribution of national TE experts and their interpretations of the official documents also provided accurate and up-to-date information about teachers' knowledge, skills and competences used in the documents in their country.

The reasons for the heterogeneity of the organization and documentation of TE are partly due to the different educational systems of the Member States, but also due to the large reforms going on in higher education and TE systems in the Member States. Several responses from the Member States included a reference to these reforms. However, this observed heterogeneity in the material might also be partly due to the fact that the contact persons come from different organisations: some of them were from the Ministry level, some from universities and some from TE institutions or other organizations (Figure 1). Although they are all TE specialists, they have given their response from their point of view and may have seen the TE situation differently if compared with others.

4.1.1 Three models of defining teachers' competences

In the Member States there are mainly three kinds of models to define teachers' skills and competences in TE[58] (se Table 6).

In the first model, teachers' skills and competences in TE have been defined in a fairly centralized way at national level. These countries are Cyprus, Estonia, Germany, Slovenia and the UK. In these Member States the Government or the

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[58] According to Eurydice in most countries the curricular components and standards of achievement follow national guidelines set by Ministries of Education or professional bodies such as Teaching Councils, lending a degree of homogeneity to programmes. In others, university autonomy takes precedence and there may be great disparities between courses in different universities. According to this study, curricular components are defined by these two models, but standards of achievement, if meaning skills and competences, have been defined with two kinds of model (Table 7__).

Ministry or a governmental body, such as a Teaching Council or similar, quite strictly regulates the competences which must be included in TE curricula or other TE documents.

The second model is applied in 18 countries where the Government or the Ministry sets a broad framework for defining competences for TE, but does not define the skills and competences the teachers should acquire during TE courses. These countries are Austria, Belgium, Bulgaria, Denmark, France, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania, Slovakia, Spain and Sweden.

In this model, universities or TE institutes decide autonomously if they want to define and include theachers' skills and competences in their TE curricula or not. Thus, although teachers' skills and competences could be mentioned in the curricula of individual universities or TE institutes, they often provide only a syllabus for students, where the name of the programmes, the length and the amount of credits are mentioned, without any reference to the content of the courses. The autonomy of the institutions allows this only if the law and other regulations are applied.

The third model is applied in four countries, the Czech Republic, Finland, Greece and Malta, where the definition of skills and competences for TE has not been documented at all at national level but has possibly been defined at university or TE institute level, if at all.

However, Estonia, Flemish and French Belgium, Denmark, Germany, Romania and Sweden are examples of Member States where teachers' skills and competences have been listed quite carefully either at national level or at institute level. These countries have a quite comprehensive list of the skills and competences required of teachers.

According to some responses from the network, it seems possible that, although competences have been written out in TE curricula or other official documents, implementation in practice in TE varies depending on the extent to which the authorities control the implementation and to which teacher trainers take them into account in teaching (e.g., in Italy, see the Section 4.6).

It is to be noted, however, that skills and competences that teachers are required to possess have been described in a more explicit and detailed way in those countries where national teaching bodies, e.g., Teaching Councils develop, accredit and evaluate TE programmes, or control entry to the teaching profession. This is the case, for example, in Estonia, the Czech Republic, Germany, Ireland, Slovenia and the UK.

In those countries where the responsibility for TE curricula and their implementation is in separate TE institutions with more freedom in its planning and implementation, the definition of competences in TE curricula and other documents is more diverse.

Although the minimum competences mentioned in the documents do not carry exactly the same names as in the EU documents, quite many similarities can be

found. Information on the levels of definition of teachers' skills and competences is summarized in Table 6.

Table 6.   Level of definition of teachers' skills and competences

Country	Definition of the TE teachers' skills and competences	TE institutions autonomously	Government/ Ministry sets broad framework, Universities/ TE institutions interpret	Centralised system, Govern./ Ministry regulates
Austria	The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder coordinates		X	
Belgium Flemish	Flemish Parliament approves basic competences at different levels		X	
Belgium French	Statutory contents from legislation, TE institutes autonomously		X	
Bulgaria	Nationally in general, TE institutes autonomously		X	
Cyprus	Prepared but not yet agreed, process unfinished			X
Czech	No criteria for teachers' competences at national level, institutional autonomy	X		
Denmark	National qualifications framework		X	
Estonia	Estonian Standard of Higher Education accredited by Estonian Higher Education Quality Assessment Council			X
Finland	Institutional autonomy	X		
France	National Law: Common 10 competences, institutions take them into consideration		X	

Country	Description			
Germany	General TE standards by Standing Conference of the Ministers of Education and Cultural Affairs of the Länder, binding for TE in each Land			X
Greece	Institutional autonomy	X		
Hungary	General and subject requirements by the Minister of Education.		X	
Ireland	The Teaching Council (a statutory body constituted under the Teaching Council Act 2001) establishes, publishes, reviews and maintains codes of professional conduct for teachers which shall include standards of teaching, knowledge, skill and competence		X	
Italy	National qualification frameworks		X	
Latvia	Determined by the curriculum which is coordinated by the Ministry		X	
Lithuania	Generally in The Teacher Training Conception and in the Specifications of Teachers' Professional Competence, University basic study programmes must comply with the regulations		X	
Luxemburg	The Ministry of Education issued Teacher competence profile in 2005, University of L. complies		X	
Malta	University of Malta	X		
Netherlands	Institutional autonomy, competences accepted by government		X	
Poland	The General Council of HE sets minimum requirements		X	
Portugal	National law, TE institutes comply		X	

Country				
Romania	National qualifications framework, Universities comply		X	
Slovakia	Competences accepted by Slovak Accreditation Commission, TE institutes define 40%	64	X	
Slovenia	The Council of Experts and the Minister of Education stipulate for the TE institutes			X
Spain	Core competences at national level, universities comply		X	
Sweden	Government's Degree Ordinance requirements, TE institutes specify		X	
UK England	General Teaching Council England			X
UK Scotland	General Teaching Council Scotland			X
UK Wales	General Teaching Council Wales			X
UK Northern Ireland	General Teaching Council Northern Ireland			X

The questionnaire data also validates the picture obtained from the document data. Skills and competences for TE have been determined in most cases at TE institution level and, secondly, either at Ministry or at University level. But, as recognised from this result, the extent to which different levels define competences varies. The result also depends on the organisation of TE in the country, whether TE institutes have the status of university or college or whether they are acting under some faculty of a university (as in Finland) or whether they are independent institutions under universities. (Figure 2.)
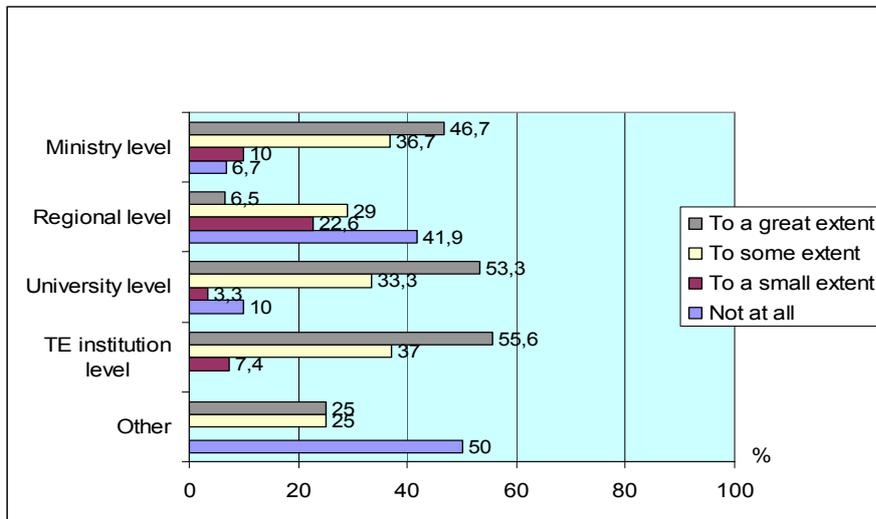
Figure 2.   Levels where the skills and competences for teachers' degrees have been defined

4.1.2 Teachers' competence clusters in TE documents

According to the questionnaire and document data, subject competences, pedagogic competences and competences concerning integrating theory and practice and quality assurance were mainly determined at national level (laws, Ministry orders or recommendations). In contrast, more variation was seen among other clusters of competence which were more often taken into consideration not only at national level but also in TE institutions. (Figure 3.)
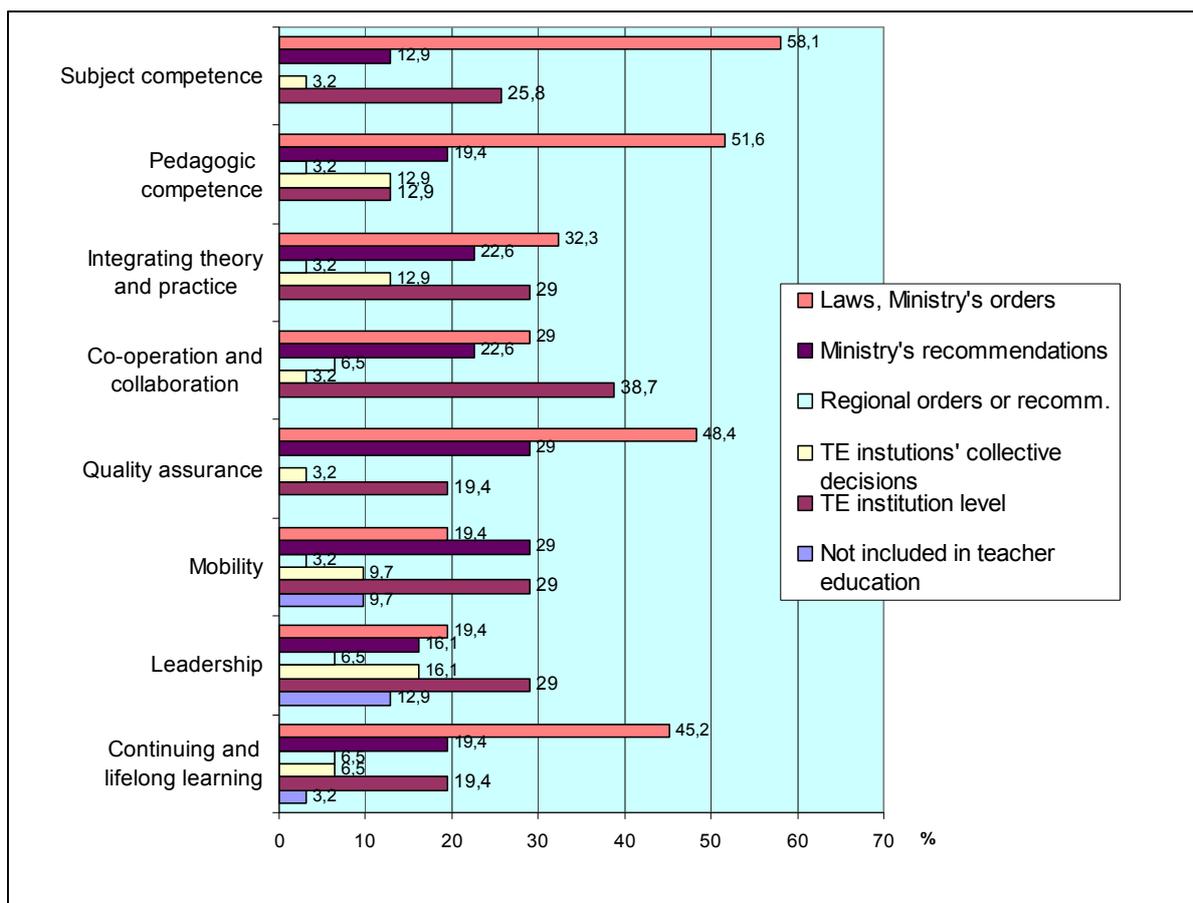
Figure 3. Levels where separate teachers' skills and competences have been taken into consideration in planning

The following sections include some comments from the interviews concerning teachers' skills and competences[59] in TE documents. These notes can be considered as examples of how certain competence groups have been taken into consideration in the case countries.

1. **Subject competences** (e.g. managing, structuring and restructuring subject knowledge, integrating subject knowledge and pedagogic skills, applying constructive strategies in subject knowledge processing) and
2. **Pedagogic competences** (e.g., employing a range of teaching and learning strategies, supporting students' autonomous learning, using diverse teaching methods, stimulating students' socio-emotional and moral development, encouraging multicultural respect and understanding, teaching heterogeneous classes, guiding and supporting learners)

In all case countries, subject competences were statedpressed to be the most fundamental competences, both in primary and secondary school TE. In secondary TE, however, teacher students have thoroughly studied one or more sciences and for them, therefore, pedagogical issues were considered to be more important.

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[59] See the summaries of the interviews in the Section 4.6.

Currently in some countries there are discussions about the importance of subject and pedagogical competences. For example, in Catalonia, traditionally subject competences have been more emphasised but nowadays, pedagogic competences seem to be more important. Until now, secondary school teachers have needed five years of subject studies plus a three-month certificate of pedagogical studies. Primary school teachers were also more specialised in certain subjects in the past, but nowadays they are trained more to be generalists and secondary school teachers are required to obtain a one year Master's degree in psycho-pedagogical studies.

All the interviewees spoke about pedagogic competences and the importance of the single competences in this cluster. One aspect which emerged was that single competences under the pedagogic cluster are so extensive and wide that in some TE contexts it is not possible to include all of these in initial TE, or not at least to the extent they should be present. Therefore, some basic competences should be guaranteed to be included in initial TE, and some competences have to be taught later in teachers' in-service education.

One of these single competences has become increasingly important in almost all case countries, namely teaching heterogeneous classes. For example, in Catalonia, 16% of pupils in classes have a migrant background and in Barcelona alone, there are about 200 languages spoken in schools. In these classes there are many challenges, not only different languages but also multicultural and social differences. Therefore, it was emphasised that although primary school teachers are usually trained to be generalists and must receive pedagogical competences, secondary school teachers are also required to pursue pedagogical studies, to be better prepared when teaching these heterogeneous groups, e.g., with a diverse ethnic background.

3. **Integrating theory and practice** (e.g. integrating study and practice, using research-based learning, using guided teaching practice, learning the acquisition of information and development of knowledge, supporting research orientation, carrying out research)

As to the relationship between integrating theory and practice, organising the practice periods in TE varies considerably between different countries. Some countries (e.g., Scotland) have special field schools where the practice takes place. Some countries (e.g., Finland) have in addition, or exclusively, special schools whose role is to concentrate only on practice teacher students. In some countries practice is not given much attention whereas in others integrating theory and practice is perhaps the most important part of TE. These arrangements also influence to what extent practice takes place in TE and what kind of skills and competences concerning these issues are included in its contents.

In the questionnaire data, however, there was also deviation between different respondents from the same country, which might reflect the fact that these proportions have not been determined exactly in the framework given by the Ministries or mentioned in TE curricula or other TE documents. According to these results, in primary TE about 30% of respondents reported that the proportion of theoretical studies is below 70% of the studies (that is, the proportion of classroom

practice is 30% or over). About 35% estimated the proportion of theoretical studies to be 70 – 80%, and nearly 40% to be 80 – 95%[60]. There were also countries where the proportion of classroom practice both in primary and secondary teacher was much lower. For example, in some countries (e.g., the Czech Republic, Estonia, Latvia) the ratio was 85 / 15 or even 95 / 5, whereas in most countries the ratio was 60% / 40% in primary and 80% / 20% in secondary school TE. Thus, the proportion of theoretical studies and classroom practice varies quite a lot in different countries, both in primary and secondary TE, although the proportion of theoretical studies is in all cases higher than the proportion of practice.

Research-based learning[61] and teaching and the skills and competences connected to these, are also included in this cluster 'Integrating theory and practice', and recently these have received more attention in many countries. It would certainly be highly recommended to also include these competences in TE in the future. In many countries, this area has been taken very seriously because of the many positive experiences and research results from those countries where research- or evidence- or problem-based TE[62] [63] [64] has already been implemented.

4. **Co-operation and collaboration** (e.g., between students, colleagues, parents and schools, working effectively with the local community, with work-based training providers and stakeholders, supporting communication skills, using collaborative learning methods, promoting a safe, respectful school environment)

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[60] Percentages used adding up to 100%.

[61] In Finnish TE the principles used as **guidelines for research-based TE** are:

1) Teachers need a profound knowledge of the most recent advances in research in the subjects they teach. In addition, they need to be familiar with the latest research on how something can be taught and learnt. Interdisciplinary research on subject content knowledge and pedagogical content knowledge provides the foundation for developing teaching methods that can be adapted to suit different learners.

2) TE in itself should also be an object of study and research. This research should provide knowledge about the effectiveness and quality of TE implemented by various means and in different cultural contexts.

3) The aim is that teachers internalize a research-orientated attitude towards their work. This means that teachers learn to take an analytical and open-minded approach to their work, that they draw conclusions based on their observations and experiences, and that they develop their teaching and learning environments in a systematic way. (*Source:* Niemi, H. & Jakku-Sihvonen, R. (2006) Research-based Teacher Education. In R. Jakku-Sihvonen & H. Niemi (eds.) (2006) Research-based Teacher Education in Finland – Reflections by Finnish Teacher Educators. Suomen kasvatustieteellinen seura. Kasvatusalan tutkimuksia 25. Turku: Painosalama, 31-50.)

See also Niemi, H. (2009). Why Finland on the top? Reflections on the reasons for the Pisa success. Paper presented at the 3rd Redesigning Pedagogy International Conference. June 2009. Singapore.

[62] See Oser, Achtenhagen & Renold (eds.) (2006) "Competence oriented teacher training. Old research demands and new pathways", http://www.sensepublishers.com/catalog/files/90-77874-68-2.pdf, where TE has been discussed from various points of view.

[63] Kansanen, P. (2007) Research-based Teacher Eduction. In R. Jakku-Sihvonen & H. Niemi (eds.) (2007) Education as a Societal Contributor. Frankfurt am Main: Peter Lang, 131-146.

[64] Markovitsch, J. & Messerer, K. (2006) Practice-Oriented Methods in Teaching and Learning in Higher Education: Theory and Empirical Evidence. In P. Tynjälä, J. Välimaa & Boulton-Lewis, G. (eds.) (2006) Higher Education and Working Life. Collaborations, Confrontations and Challenges. Advances in Learning and Instruction Series. Oxford: Elsevier, 177-194.

The results concerning teachers' skills and competences revealed that existing and future TE should include more of those skills that concentrate on improving teachers' capabilities to communicate and co-operate more diversely with colleagues, parents, etc., and also with various stakeholders and authorities outside the school.

One of the results concerning these competences was that utilizing co-operation within school life is partly culturally bound. In some interviews examples were given about teachers in school: Teachers did not even have a 'teaching staff room' for spending their spare time, resting or marking their homework, but they were either teaching in their classrooms or they left for home in their spare time. Encouraging communication with colleagues is important for many reasons: e.g., to be able to discuss pupils'/students' progress/problems/behaviour or developing school working conditions, etc. Another interviewee mentioned that in the school culture of the country teachers were seen to be autonomous individuals and did not want to collaborate with colleagues and work in teams, etc. The same situation has been found in universities in some countries: There has not been a tradition of collaboration between professors. This kind of cultural situation is not very fruitful for supporting co-operation skills for teachers in schools.

Nevertheless, these skills were mostly understood to be very important and they were also used in various situations. Team working methods in schools have increased in different ways, likewise co-operation with parents, etc.

5. **Quality assurance** (e.g. understanding and applying the principles of assessment, contributing to systems of quality assurance, using the results of assessment to evaluate and improve teaching and to improve standards of attainment)

Evaluation of education has become an important tool for the development of the education system at all levels and it has increasingly become a tool for development work rather than for control. Self-assessment is a part of the evaluation process but its aim is also to develop one's own work in the workplace. External assessments are used not only as a follow-up procedure but also alongside the educational process itself, depending on the duration of the given activities. Altogether, the trend is towards transformation from quality assurance into quality development in regard to efficiency and effectiveness. Even those countries where quality assurance and evaluation have traditionally not been extensively used have taken these issues more and more seriously and in several countries there are diverse systems and methods to evaluate education at all levels.

Unfortunately, according to many of the interviewees, skills and competences concerning quality assurance have not been very important until now and seem to be insufficient in the TE curricula of many countries. Nowadays, when evaluation and assessment of all kind of activities is considered very important, these competences must also be emphasized in TE curricula. Quality assurance has become a part of almost all activities, also in schools.

6.   **Mobility**[65] (e.g., supporting students' and teachers' European and international contacts, encouraging student exchange, learning and using European languages, learning and understanding different (European) cultures)

Nowadays mobility is given more attention than earlier. Some countries, e.g., Finland, see international co-operation in education, especially regarding student exchange, as important for raising education and research to the highest international standard[66]. However, e.g., in Italy and Spain, mobility is one of the competence groups which has not been developed very effectively. According to one interviewee, it was seen that promoting both teachers' and teacher students' mobility should be encouraged to develop more versatile language skills in schools, especially in those countries with a very strong language identity and traditions of managing with it in their own country.

This same point came up especially in some case studies. The educational system, for example in France, Italy, Catalonia and Scotland, has not been very active in promoting students' foreign language skills, which has influenced the participation rate in mobility activities to foreign countries. These countries are considered to be included in a large language area with more internal mobility opportunities and do not perhaps need other languages. However, these countries do have foreign university students from their language area, for example in Catalonia there are many students from South America, e.g. from Argentina and Colombia, although most of them study Master's degrees, not in TE. Instead, in those countries situated in a limited language area, such as Finland, foreign language skills have long been important already in primary schools, even at the pre-primary stage. Thus, for increasing mobility, and also in order to promote the harmonizing of the European Area, language skills and competences should be supported and promoted not only in school curricula, but also in TE[67] in the Member States.

According to the responses in the questionnaire data, most of the respondents, 65%, believed that international mobility is important for teacher students but not a decisive factor, 26% that it is very important. As for teachers, the proportions were the same, but more of the respondents, 39 %, considered mobility to be very important for teachers.

7.   **Leadership** (e.g. supporting leadership competences so as to develop the institution and the learning environment, collaboration between institutions and communities, regional collaboration, staff development, strategic, pedagogic and economic leadership, encouraging teachers to career development)

In November 2006 the European Council stated that 'the motivation, skills and competences of teachers, trainers, other teaching staff and guidance and welfare

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[65] See e.g., "Mobility of Teachers and Trainers (2006), http://ec.europa.eu/education/pdf/doc258_en.pdf
[66] Sura, S. & Virtanen, J. (2000) What do Exchange Students Learn? In S. Langeland & S. Sura (eds.) The European Dimension in Teacher Education. University of Turku, Faculty of Education. Research Reports C 10, 39-68.
[67] European Commission. (2007) A Rewarding Challenge: how the Multiplicity of Languages could strengthen Europe, See: http://ec.europa.eu/education/languages/pdf/doc1646_en.pdf

services, as well as the quality of school leadership, are key factors in achieving high quality learning outcomes' and that 'the efforts of teaching staff should be supported by continuous professional development and by good cooperation with parents, pupil welfare services and the wider community.'[68]

Leadership is one of the competence groups which have been given least attention compared with other competence areas. This is partly due to the various methods for choosing school heads and principals. In some countries, leadership has been developed very separately and the principals in these countries are more or less administrative leaders who have received a special education for school leaders. In other countries, the leadership is more like a way for teachers to progress in their career development (e.g., in Finland), although nowadays there are also special leadership education programmes for those wanting to work as a school leader). In others, yet again, the authorities and policy makers consider that these competences do not belong to teachers (e.g., in France).

8.   Continuing and Lifelong Learning [69] [70] [71] [72] [73](e.g., supporting and preparing students for lifelong learning, understanding the importance of self development to continue their professional development throughout their careers)

Nowadays increasing attention has been paid in TE to supporting the continuum in teachers' career development. The authorities and policy makers have become convinced that, after initial TE, the induction phase as well as teachers' continuing education during their whole career is a basic condition for guaranteeing the high quality of teaching.

Some interviewees underlined the continuing character of the teaching profession and skills and competences to support it. Some of them were convinced that future teachers should be able to take responsibility for their own learning, they should be prepared for continuous practitioner enquiry, and for reflection on their own actions.

As has been revealed, different countries have diverse practices for handling the organization of induction and in-service education, whether it is compulsory or voluntary, etc. One of the main points in developing these phases are the decisions concerning the skills and competences which should be included in initial TE and which in induction or in-service TE. Generally, teachers' in-service education was

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[68] European Commission (2007) Improving the Quality of Teacher Education, page 3; See http://ec.europa.eu/education/com392_en.pdf
http://www.eubusiness.com/Education/teacher-education.faq/?searchterm=None
[69] See also "Adult education trends and issues in Europe (2006), http://ec.europa.eu/education/pdf/doc268_en.pdf
[70] See also
"ALPINE – Adult learning professions in Europe" (2008), http://ec.europa.eu/education/more-information/doc/adultprofreport_en.pdf
[71] See also "Motivating Students for Lifelong Learning" (2000), http://books.google.fi/books?id=lerGIL-PTdEC&printsec=frontcover
[72] See "Education Policy analysis 2001. (2001), http://www.educarchile.cl/medios/20020108113337.pdf
[73] See Knapper, C.K. & Cropley, A.J. (2000) Lifelong Learning in Higher Education. London: Kogan Page. (First edition in 1991)

considered to be increasingly important in the future, but there were countries where, for various reasons, teachers' opportunities to take part in in-service education are still limited.

Summarising the results of this section, almost all competence clusters are included in TE curricula or other TE documents in the case countries, but there were some single competences which were not well known in all case countries.
The competences included under pedagogic competences were all quite well known, but there were others less known, e.g.

- Subject competences → *applying constructive strategies in subject knowledge processing*

- Integrating theory and practice → *using research based learning, learning the acquisition of information and development of knowledge*

- Co-operation & collaboration → *between colleagues, working effectively with the local community (both culture-bound)*

- Quality assurance → as a concept in some cases quite *unknown as a teacher competence*

- Mobility → as a concept in some cases quite *unknown as a teacher competence*

- Leadership → as a concept in some cases quite *unknown as a teacher competence, partly culture-bound*

- Continuing and Lifelong Learning → as a concept *in some cases earlier quite unknown as a teacher competence* but nowadays quite important and well known

4.1.3 Examples of defining teachers' competences at national level[74]

As the following examples of defining teachers' competences at national level show, in laws and other regulations, competences at national level are expressed overall very generally. In contrast, Portugal, for example, has elaborately defined competences for teachers. Germany and Spain have, for their part, also defined 'new' competences for future teachers in a more detailed way at national level.

Belgium
The Legislation on the competences of a teacher in Belgium (Law of 1998) define 10 competences at class and school level:
- Micro (class) level : Teacher as a coach of learning and developing processes, teacher as an educator, teacher as an expert in the subject matter, teacher as an organiser, teacher as an innovator,

- Meso (school) level: Teacher as a partner of parents, teacher as a member of a team, teacher as a partner of external authorities.

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[74] The examples are based on the responses from the TE experts of the created network and on the EURYDICE database, if there mention is made of defining competences.

France

The framework for TE curricula is decided at national level. The latest national specifications have introduced the notion of teacher competences "un socle commun de connaissances et de competences" in teacher education training. The curriculum and programmes developed at local/institutional level must take them into consideration. There are ten key competences for future teachers[75]:
- To act as a civil servant, be responsible and to respect ethical principles;
- To have a good command of the French language for teaching and communication;
- To have a good knowledge of the subject(s) of teaching and to have a good general knowledge of culture;
- To plan and organise his/her teaching;
- To organise class work;
- To take pupils' diversity into account;
- To evaluate the pupils;
- To use new information and communication technologies;
- To work together with his/her teacher team, parents and school partners;
- To innovate and to be responsible for his/her own training.

Germany

The standing conference of the German state Ministers of Education and Cultural affairs has listed teachers competences as follows:
1) Teachers as experts in teaching and learning,
2) Teachers as educators,
3) Teachers as observers, assessors and counsellors,
4) Teachers as life-long learners and
5) Teachers as motors of schools development and innovations
Germany has also defined 'new' competences for teachers:
1) subject competences (structuring and restructuring of knowledge, constructivist strategies in subject knowledge processing, learner orientation and diagnostic competence),
2) didactic competences (active learning strategies, responding to students' learning processes and learning progression, promoting differentiated learning opportunities) and
3) pedagogical and social competences (managing diversity, promoting cultural awareness, learning awareness, promoting social learning, promoting respect, tolerance and collaboration in classes and school communities)

Lithuania

University basic study programmes must comply with the regulations establishing the content of the corresponding study field approved by the Ministry of Education and Science. In 2004, subject to the Provisions of the National Education Strategy 2003–2012, the Teacher Training Conception that outlined the main guidelines for improving the training of teachers was developed. The Teacher Training Conception specifies that teacher training must provide conditions for the would-be pedagogue to acquire the kind of competence that is necessary to fulfil the teacher's new role as an education organiser, creative educator, developer of opportunities, coach, adviser,

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[75] Source : Programme de formation Professorat des écoles 2008-2009 (2008); translation from French.

partner and mediator between the pupil and various modern information sources. Requirements for teachers' competence are set out in the regulations on teacher training and those on discrete areas of studies, and also in the Specifications of Teachers' Professional Competence.

Luxembourg

The programme of the Bachelor's degree in Educational Sciences has been determined in the University of Luxemburg. The guiding principles are built around four core objectives:

- Learning how to learn instead of "teaching how to teach".

- Developing in a community of learners instead of "studying as an isolated actor"

- Being a responsible actor and author instead of "being a passive agent"

- Growing and developing instead of "imitating"

The main principle is a research-oriented programme structure. The Professional Competences define that the BPSE training continuum of "transdisciplinary training – research orientation – reflective innovation" aims to support the development of the following professional competences:

- engage in professional development

- ensure a role of social actor

- develop a professional ethic

- take into account the diversity of the pupils

- promote the development of multilingual identities

- plan and manage pedagogical activities within a class

- design meaningful learning activities mediated by ICT

- conceive and conduct learning activities

- assess the progressive development of children's competences

Poland

The Minister of Education and Sports determines the qualifications required of teachers and the minimum number of hours assigned for pedagogical training. According to the regulations issued by the Minister, pedagogical training must comprise its' regulations. However, syllabuses and curricula in higher education institutions are determined by their autonomous authorities. The General Council of Higher Education does, however, define the minimum curriculum requirements for individual fields of study and the minimum number of contact hours.
The new legislation provides the model of a graduate including the following competences:

- Competences related to the chosen specialities

- Competences related to psychology and pedagogy

- Competences related to teaching of a given subject

- Competences related to ICT

- Foreign language skills – proficiency in at least one foreign language (at the B2 level)

- Ability to cooperate with pupils and other teachers, pupils' families and the local community in the implementation of educational tasks

- Ability to undertake educational tasks from beyond the scope of the given subject

- Ability to create plans for their own activities and to undertake activities promoting models of good pedagogical practice

- Ability to manage their own professional and personal development and to undertake in-service training

- Ability to apply the rules of law related to the education system and the teacher professional status.

Portugal

The main learning outcome areas (knowledge, competences and attitudes) that characterise the teaching qualifications are identified in the Decree-Law nº 43/2007 of 22nd February:

• _Specific subjects of each teaching area_**:** learning outcomes in the areas of knowledge that learners have to acquire, according to the demands of the school curriculum;

• _Education:_ learning outcomes relevant to all teachers' performance in the classroom, in the school, in the relationship with the community and in participation in the development of education policy;

• _Specific didactics:_ learning outcomes related to the learning process and the teaching of curriculum areas or subjects that individual teachers are responsible for, taking into account the suitability of this process to the specific nature of the areas or subjects, to the objectives of the education level they are in, and to the age of the learners;

• _Teaching practice:_ learning outcomes related to the ability to use knowledge in concrete professional teaching situations and to the capacity to analyse and evaluate them so as to make them suitable to a specific context;

• _Cultural, social and ethical:_ learning outcomes related to the major problems of the world today, cross-curricular areas and the ethical and civic aspects of teaching;

• _Methodologies of education research:_ learning outcomes related to the principles and methods that allow teachers to adopt a research-based attitude to professional performance in specific contexts.

It is assumed that these learning areas should not be worked at separately but as components of a whole in the construction of professional knowledge. The initial teacher education policy particularly emphasises the above-mentioned principles of the Commission Communication:

- The learning outcomes that characterise it;
- The research-based teaching practice;
- The supervised teaching practice in a school context.

Scotland

The Standard for initial TE is defined as:

1) What is expected of a student teacher at the end of ITE, the level of performance expected of student teachers who successfully complete a programme leading to the award of a Teaching Qualification for Primary or

Secondary Education,

2) General frames of the programmes (core professional interests and key educational principles),

3) Aspects of professional development

The Code of Practice on Teacher Competence, The Standard for Full Registration and Standard for Chartered Teacher define Teacher Competence (professional knowledge and understanding, professional skills and abilities and professional values and personal commitment)

Slovakia

In accordance with the Ministry of Education of the Slovak Republic Decree No. 41/1996 of the Law Code on professional and pedagogical competence of educational staff, supplemented by Decree No. 374/2005 of the Law Code, the teacher's qualification consists of professional and pedagogical competences:

- Professional competence – a set of professional knowledge, skills and habits acquired by study at school.

- Pedagogical competence – i knowledge of pedagogy, psychology, didactics and skills necessary for performing educational activities.

The specification of these very general formulations is done by individual faculties, who set concrete aims, content, methods and means of preparation of future teachers and they are formulated in the graduate's profile. Besides the above decree there is no other document that sets the requirements for the profile of future teachers. It is required so that the preparation of each teacher involves the problems of forming basic teacher competences with emphasis on inter- and intrapersonal qualities, problems of efficient use of information and communication technologies, the study of two foreign languages, modern management of education and methodology of research work.

Spain

The academic qualifications required to teach are uniform throughout the entire country, although they do vary according to the different levels of the education system. Legislation regulating the new official university degrees of pre-primary and primary education *maestro* establishes the competences and abilities to be acquired by students; among them, there is a series of competences relating to

- the knowledge of curricular objectives and contents;

- the drawing up of learning contexts set within a framework for diversity;

- the knowledge of information and communication technologies;

- the organisation of schools; fostering coexistence both inside and outside the classroom;

- dealing with language learning situations within multicultural and multilingual contexts; social abilities related to family relationships;

- careful thinking about classroom activity to improve and innovatively develop teaching practice; and/or
- the knowledge of quality education improvement models.

The 2007 regulation establishing the new pedagogical and didactic training required to teach at secondary level, sets, among others, the following competences to be acquired by students taking the programme:

- knowledge of curricular contents,

- planning and assessment of the teaching-learning process,

- participation in curricular specification,

- developing didactic methodologies adapted to the individual characteristics of the student,

- fostering in-classroom communication and coexistence, developing guidance and academic supervision,

- participating in innovation and educational research activities, abilities for family guidance, and

- knowledge of the institutional organisation of the education system and of the models for quality improvement.

4.1.4 Defining the competences in TE documents at institutional level[76]

Noticeable about the teaching competences that are most commonly defined at institutional level is that usually in those Member States where universities and TE institutions are quite independent, TE institutions determine the competences which each institute considers to be important for its TE, within the frames given at national level. However, the data did not give much evidence of competences defined at university or TE institution level. In Belgium, though, the documents mentioned that the TE institutions most often make autonomous definitions of how the ten competencies mentioned at national level (see above, the Section 4.1.3) will be described and developed into TE curriculum and how they will be evaluated at the end of the program.

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[76] However, the document data of this study provided only a few examples of TE curricula in separate TE institutions.

4.2 Teachers' competences in initial TE

4.2.1 Competences in primary TE

According to the questionnaire data, in primary TE, both the subject and pedagogic competence groups have been taken into consideration in primary TE curricula, (nearly 100%) with the other groups receiving less emphasis, particularly leadership and mobility. (Figure 4.)
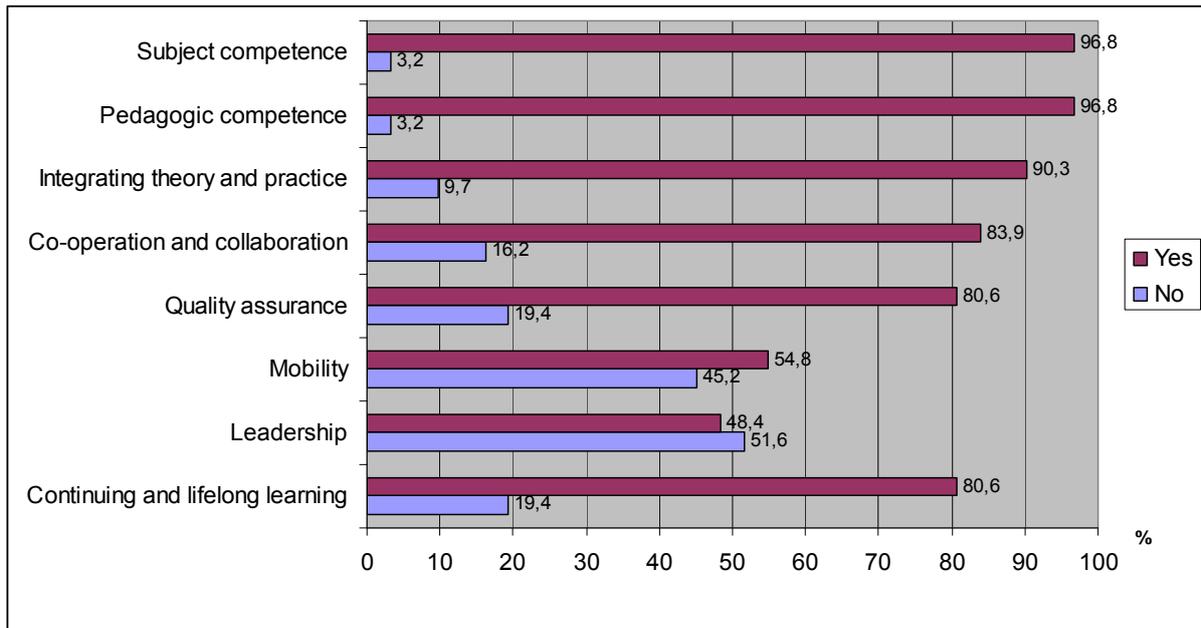

Figure 4.   Skills and competences in planning primary school teachers' TE curricula

The most important competence group in *primary school TE* concerns pedagogic competences, as over 93 per cent of the respondents ranked this as highly important. Integrating theory and practice also seems to be a very important cluster, as well as subject competences. In contrast, there is much more variance between the other groups, with 'leadership' and 'mobility' as the least important. (Figure 5.)
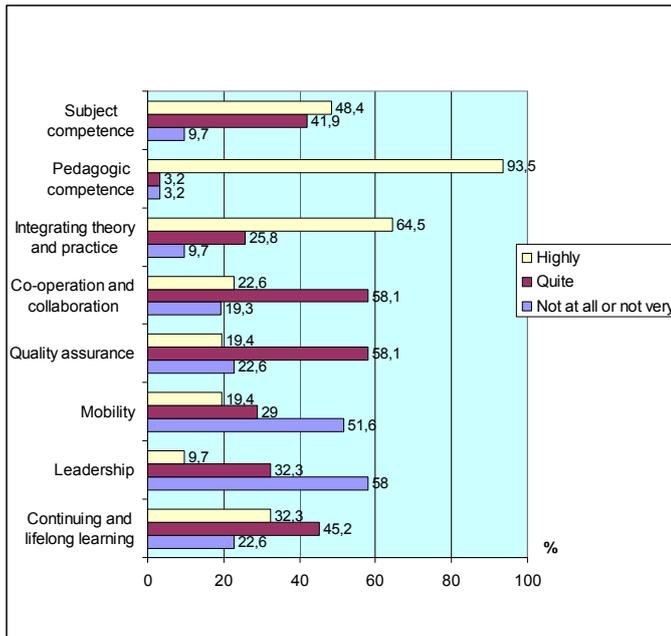
Figure 5.   Importance of the skills and competences in primary school teachers'
                TE curricula

4.2.2 Competences in secondary TE

In secondary school TE, the variation was more extensive than in primary TE.
However, subject competences, pedagogic competences, integrating theory and
practice and co-operation and collaboration as well as continuing and lifelong
learning were taken into consideration to a high extent, less so leadership and
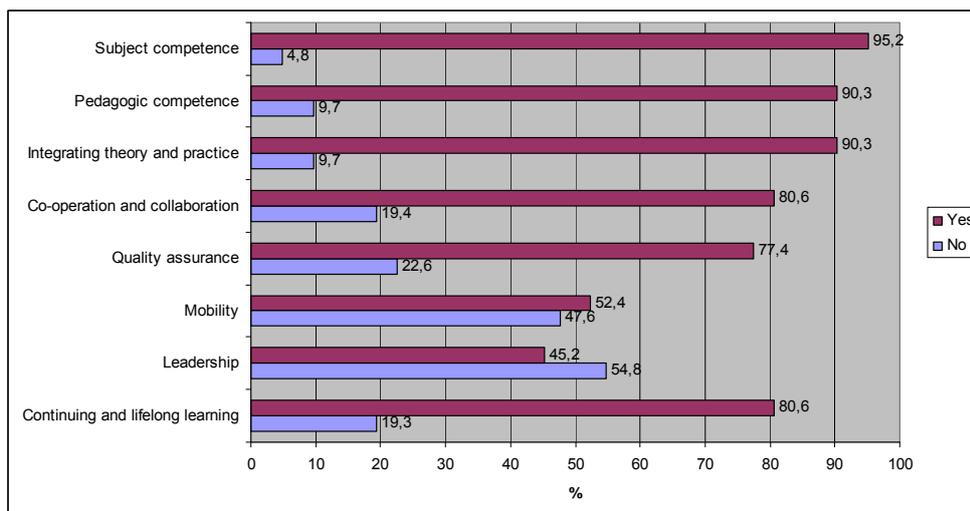mobility. (Figure 6.)

Figure 6.   Skills and competences in planning secondary school TE curricula

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In *secondary school TE* the most important competence group was subject competences. The next most important were pedagogic competences, integrating theory and practice and co-operation and collaboration, followed by continuing and lifelong learning. The least important was 'leadership'. (Figure 7.)
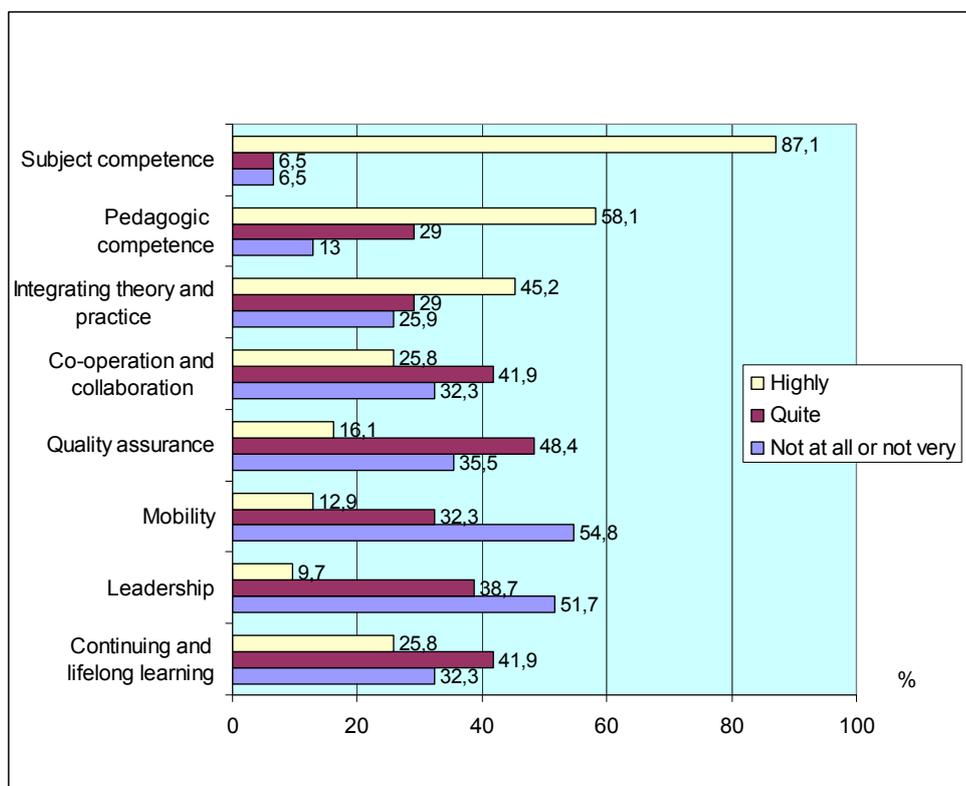

Figure 7.   Importance of the skills and competences in secondary school TE curricula

<u>*Comparing the importance of the competence clusters in primary and secondary school TE*</u>

When comparing the importance of different skills and competences in primary and secondary school TE, certain differences were discovered[77]. The most significant difference (***)[78] was in pedagogic competences, which was seen as more important in primary TE than in secondary TE.

There were also differences (*) between primary and secondary TE in the importance of competences in relation to subject competences, integrating theory and practice,

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[77] Because of small N (31) the results of this t-test only indicate the situation among the respondents but cannot be generalized directly.

[78] The meaning of the asterisks:
***	Result statistically highly significant	($p \leq 0.001$),
**	Result statistically significant	($0.01 < p \leq 0.01$),
*	Result statistically almost significant	($0.01 < p \leq 0.05$)
n.s.	Intergroup differences statistically insignificant	

co-operation and collaboration and quality assurance. The importance of competences concerning mobility, leadership and continuing and lifelong learning did not differ between these two TE groups. (Annex 4, Table 1.)

When comparing the means calculated from all skills and competence clusters, their importance did not differ significantly. The mean of primary TE was slightly higher (3,05) than in secondary TE (2,91), thus the importance of all skills and competences was evaluated as slightly higher in primary than in secondary TE.

Teachers' skills and competences in initial TE

- More often the guidelines and frames concerning teachers' competences have been stated at Ministry level, but the universities and TE institutes have determined them independently if they have written the skills and competences in their curricula or other TE documents. (See Table 6) Subject competences, pedagogic competences, competences concerning integrating theory and practice and quality assurance were mainly determined at national level, others were taken into consideration at university or TE institution level, if at all.
- If the TE system includes a Teaching Council or similar, the skills and competences have been taken into consideration in TE more often than in those counties where the TE institutions determine the curricula more independently.
- Although competences have been elaborated in TE curricula or other official documents, using them in TE practice can vary depending on the extent to which the authorities control the implementation and to which teacher trainers take them into consideration.
- Pedagogical competences were more important in primary school TE and subject competences in secondary school TE.
- Competences concerning mobility, leadership and continuing and life-long learning have been given less attention than other skills and competences, both in primary and secondary TE.
- There were also some cultural differences between the Member States: among the new members, TE was developed more often according to the European recommendations whereas the older Member States seemed to be willing to plan their TE more independently. Their TE reforms were also more often still in progress whereas in the new countries the reform of TE had been initiated on a faster schedule. One of the pedagogic competences, teaching heterogeneous classes, has become extremely important in all countries, and is important as a basic competence to be taught in initial TE.
- Integrating theory and practice is one element of the research-based approach, which has become important in TE in different countries more than earlier.
- Teachers' skills and competences to communicate and co-operate more diversely with colleagues, parents, and with various stakeholders and authorities outside the school, should be promoted in TE. Also competences concerning team working methods in schools have increased in TE.
- Skills and competences for quality assurance have not been sufficiently emphasized in TE.
- Both teachers' and teacher students' competences for mobility should be supported more than before.

4.3   Teachers' competences in induction and in-service TE

The concept of the teaching profession has undergone significant changes in recent decades and changes will continue to take place in the future in all countries. These changes have been partly due to changes in TE policy-making, but also because of huge changes in society. Changes in the teaching profession require continuous updating of skills and competences from teachers, skills and competences whichare also constantly changing. These factors create pressure both on initial TE but also increasingly on teachers' in-service education as well on the induction phase. This is why it is extremely important in developing TE to take care that teachers get the skills and competences they need during their whole teaching career, throughout the continuum. However, the importance of teachers' in-service education has been emphasised in all main EC texts concerning improving the quality of TE. '

According to the results concerning defining teachers' competences for the induction phase and for in-service TE, the situation is quite problematic. There is no clear picture of how the defining of these issues for these phases has taken place, if at all. From the results of this study, not from the document data and nor from the questionnaire data, no reliable picture has emerged of the situation in different countries. Even organising induction as well as in-service TE seems to be very heterogeneously arranged (see Annex 5) and it is not obvious how the curricula for these phases has been determined and what the contents of the courses are, or even what the teachers' needs in these phases in different countries are. Finding answers to these kinds of questions would need a more focused study method.

However, the questionnaire data reveals that the responsibility for organising the induction phase for NQTs lies to a great extent (70%) at school level and that the most important role in supporting and counselling NQTs is played by experienced teachers (57%), the principals of schools (50%) and the teachers of the same subject (48%). According to these results it is the schools which most probably plan the content for supporting NQTs. (Annex 5 and 6.)

Likewise, according to the questionnaire data, the responsibility for organising in-service TE is mainly in TE institutions (78%) or in universities (65%) (Annex 7). In principle, the contents of teachers' in-service education have been mainly determined at TE institutes (68%) of in universities (61%) (Figure 8). Thus, usually the institution which is mainly responsible for providing teachers' in-service education also plans the contents of the education, e.g. skills and competences which should be included in-service TE.
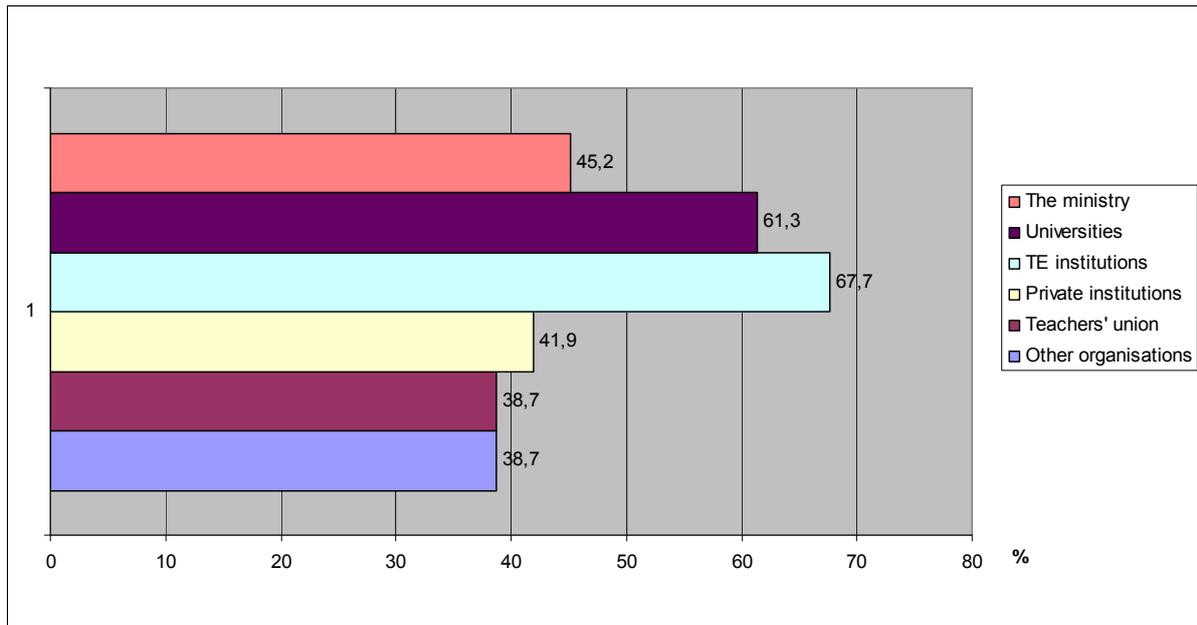
Figure 8.   Planning the contents of teachers' in-service education

Thus, the data provides only some evidence of the skills and competences included in the induction phase and teachers' in-service education, For example in Ireland, topics addressed in in-service TE in recent years have concerned the implementation of the revised Primary Curriculum, the revised subject curricula at post-primary level, assessment, the use of ICT in schools, school leadership in the context of the School Development Planning Initiative, the integration of children with disabilities, educational disadvantage, and work with parents.[79]

In some countries (e.g. Denmark, Sweden and the United Kingdom), government campaigns and strategic policies have focused on investment in the continuing provessional development of teachers. For example in Sweden, within the four years from 2007 to 2010, the government is offering 30 000 fully qualified teachers (i.e. around 25% of all primary and secondary school teachers) training to reinforce their knowledge of their subjects and enhance their teaching ability.[80]

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[79] Conway, P.F., Murphy, R., Rath, A. & Hall, K. (2009) Learning to teach and its implications for the continuum of teacher education: A nine-country cross-national study. Report Commissioned by the Teaching Council. University College Cork. Internet:
http://www.teachingcouncil.ie/_fileupload/Publications/LearningToTeach-ConwayMurphyRathHall-2009_10344263.pdf

[80] Delhaxhe, A. (ed.) (2008) Levels of Autonomy and Responsibilities of Teachers in Europe. Brussels: Eurydice,
http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/094EN.pdf

Teachers' skills and competences in induction and in-service TE

- One of the main questions in developing induction and in-service TE is deciding on which skills and competences should be included in initial TE and which in induction or in-service TE. Thus, it would be highly advisable to carry out a research project concerning these issues.
- All the pedagogic competences cannot be included in initial TE, at least not to the extent they should be. Thus, some of them have to be guaranteed to be included in in-service TE.
- Leadership is one of the competence groups which has been given least attention compared with other competence areas and should be variously taken into consideration, not only as heads' and principals' leadership skills but also as leadership competences teachers need when working in the classroom.
- Life-long learning aspects and understanding the teaching profession as a continuum will be important in the future.
- Future teachers should have competences to take responsibility for their own learning, and should be prepared for continuous practitioner enquiry and reflection on their own actions.

4.4   Definition of TE curricula

4.4.1   Definition of initial TE curricula

The system of TE and the definition of TE curricula depend on the HE policy and itsimplementation for TE in the country. Thus, concerning the level of decision-making at which key decisions are made about the content of initial TE curricula (whether described as topics to be covered, or as learning outcomes), two basic definition models exist for initial TE curricula in the EU countries.

In 24 Member States, Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom, the Ministry of Education or comparable authority determines the guidelines and frameworks by means of laws and regulations for the country's initial TE and universities and/or TE institutions define their own TE curricula independently according to the guidelines given by the national regulations. In these countries, national, ministry-level documents only provide very general guidelines on how TE has to be organized. These regulations concern mostly the definition of academic degree programmes and the framework for implementing them. The regulations determine, for example, the number of hours included in the various modules of the programme and the credits required for obtaining degrees. How the Bologna Process system will be applied in higher education as well as in TE is also generally determined at national level.

In most countries, the exact degree to which national laws regulate initial TE curricula is not very clear because the information received dealt only with the essentials of frameworks or guidelines which are given nationally through laws and regulations. If the amount was given, it was most often expressed as a percentage, for example, 70% at national level and 30% institutionally, as in Belgium (Source: OECD database) or 60% at national level and 40% at institutional level as in Slovakia (Source: The network).

In federal countries (e.g. Austria, Germany, Spain and the UK) the states usually have their own TE jurisdiction, although the frameworks are determined at national level. Thus, the states have their own responsibility for organising their TE under the laws of the country.

Only in three countries, Greece, Luxembourg and Malta, do TE institutes define their initial TE curricula quite independently. However, in some EU countries (e.g. the Czech Republic) TE systems and curricula are defined and regulated more strictly and centralized by national educational laws, but universities still have some freedom in defining their TE curricula.

The information received from different sources concerning the definition of TE curricula in the Member States has been gathered into Table 7. However, it should be noted that in some countries (e.g. Latvia) the TE system and definition of TE curricula seem to be rather complex and therefore comprehensive information has been difficult to gather. In these cases the country has been classified according to the impression which is most probable according to the existing data.

Table 7.   Level of definition of initial TE curricula

Country	Definition of the TE curricula	TE institutions autonomously	Government/ Ministry sets broad framework, Universities/ TE institutions interpret
Austria	Universities / Pädagogische Hochschulen in Länder plan the TE curricula autonomously, The Federal Ministry approves		X
Belgium Flemish	Government regulations, TE institutions autonomously with respect to the curriculum and the way the basic competences are integrated into the TE programme.		X
Belgium French	Framework from legislation, TE institutes autonomously		X
Bulgaria	Government regulations, otherwise universities autonomously		X

Cyprus	Nationally general goals and basic contents. Institutionally freedom only in methods of delivering		X
Czech	Curricula accepted by the Accreditation Commission under Min. of Education, Contents in departments at faculties		X
Denmark	Parlament's regulations, individual TE institutions / University Colleges autonomously		X
Estonia	National Development Plan for TE, TE institutions in universities apply		X
Finland	Nationally general laws, institutional autonomy for TE curricula		X
France	TE curriculum defined at national level, IUFMs apply.		X
Germany	Vary in Länder, but the statutory provisions follow the same general idea in curricula requirements, structure, content and output standards and competences. The "Standing Conference of the Ministers of Education and Cultural Affairs of the Länder" coordinates.		X
Greece	Institutional autonomy	X	
Hungary	Government's general regulations, institutions' detailed curricula		X
Ireland	Ministry & National Council for Curriculum & Assessment, TE institutions autonomously		X
Italy	Minimum requirements nationally, universities autonomously		X
Latvia	Ministry of Education & Science: laws, regulations, coordinates TE institutes' programmes		X
Lithuania	Ministry's regulations, universities comply		X
Luxembourg	University of Luxembourg autonomously	X	
Malta	University of Malta autonomously	X	
Netherlands	Government's legislation, TE institutes responsible for designing and defining the curricula.		X
Poland	Ministry of Education and Sports determines, TE institutes plan the contents of the curricula		X

Portugal	National Law, Institutional autonomously		X
Romania	Determined by the Ministry of Education, Research and Youth, Universities design under the legislation		X
Slovakia	Nationally 60% of the TE curricula, TE institutes 40%		X
Slovenia	General lines at national level, different options at TE institution level		X
Spain	Ministry of Education generally at national level, universities' TE curricula approval by Universities Coordinating Council and ANECA. Some institutional freedom.		X
Sweden	Government's degree ordinances, TE institutes plan independently		X
UK, England	Nationally in England		X
UK, Wales	Nationally in Wales		X
UK, Northern Ireland	Nationally in Northern Ireland		X
UK, Scotland	Nationally in Scotland		X

4.4.2 Definition of TE curricula for induction and in-service TE

The data did not clearly shed light on the definition of TE curricula in the induction phase or in-service TE, which is most probably due to the fact that the phenomenon - organising induction and in-service TE in different Member States - is complex. Even organising induction as well as in-service TE seems to be very heterogeneously arranged and it is not obvious how the curricula for these phases has been determined and what the contents of the courses are or even what the teachers' needs are in these phases in different countries. Finding answers to these kinds of questions would need a more focused study method.

As to induction, in principle, schools, which are mainly responsible for providing mentoring on the induction phase, also plan the contents of this phase (see Annex 5).

The data did not give any comprehensive picture of the contents of induction and in-service education for teachers. However, one example of a Member State where the definition of the curricula of teachers' in-service education was mentioned in the document data, was Lithuania. In Lithuania, a newly qualified teacher's in-service training goals and objectives should include:

- Creation of favourable conditions for teachers enabling them to achieve the kind of professional competence that would meet the requirements of the education reform;

- Proceeding with the decentralisation of the in-service training system by encouraging a change of in-service training and professional development forms and methods inside education institutions and by developing the network of various types of institutions providing in-service training

- Development of a new way of funding the system of in-service training

- Working out and implementing an accreditation system for in-service training programmes and institutions

- Creation of the necessary conditions for dissemination of experience accumulated

- Taking into consideration, in developing the in-service training system, the relevant recommendations of the European Union.

A very interesting objective is the last one, in which the European Union recommendations should be taken into consideration when developing teachers' in-service education.

According to the questionnaire data, the responsibility for implementation of in-service TE is mainly in TE institutions or in universities (Annex 7) and determination of the contents is mainly in TE institutes or in universities (Figure 8). Thus, it is usually the institution mainly responsible for providing teachers' in-service education which also plans the contents of the education. When doing this they most probably also define the curricula of in-service TE.

4.5 Organisation of TE

In every Member State the government regulates somehow what kind of role TE has inside the higher educational policy system in the country, and so there are different ways of organising TE in the countries. AlMmost all Member States mention TE in their legislation (definitions of academic degrees, applying the Bologna Process to the degrees, etc.) or give the frames or main rules for organising TE in TE institutions, either totally, or to some extent. Thus, the government, or a government agency, gives guidelines for how TE should be organised. The response from some countries shows that, for example, the number of hours required or the number of credits needed are mentioned, but this information has not been received from all countries. According to this data, there is no evidence of Member States where neither the government nor a government agency gives any guidelines for how TE should be organised.

According to the results, there seem to be different kinds of combinations concerning the organisation of TE. Although TE curricula are said to be constructed in independent TE institutions, organising TE seems to be more complicated. It seems that even in those cases where there is quite high institutional autonomy, some

guidelines come from the upper level, if not from national level, then most probably from university level. For example, in Finland, every TE institution acts under some university and the higher decision-making power (within the legislation given by the government) lies with the Faculty of Education (or similar) in each university where TE is organised.

Induction phase for newly qualified teachers

Annex 5 describes[81] to what extent, on average, different bodies are responsible for organizing the induction phase for NQTs. Schools (70%) are in most cases largely responsible for arranging induction for teachers, but in over half of the cases (55%) also the ministry level is responsible for this. There seem to be fairly large differences between countries because there was considerable variation. This indicates also that the proportion of the government's or ministry's responsibility varies by country.

The results show that the most important role in organising induction is played by specially qualified mentors (59 per cent). Nevertheless, also experienced teachers, teachers of the same subject, the headmaster/teacher and principal of the school have a very important role in supporting and counselling young teachers. In contrast, staff of the TE institution is not very responsible for counselling.

Probation

The main purpose of the probation period is to find out the suitability of the teacher students for their future teaching profession. Thus, some countries have organised a probation period for beginning teachers, during which they are supported and supervised and their suitability for the profession is evaluated.

The probation time is usually one or two years, during or after which the beginning teachers are assessed before they become fully qualified teachers. According to the questionnaire data, 40% of the respondents indicated that in their country they have an obligatory probation period for teacher students or newly qualified teachers, but not more than 10 % were evaluated during this period[82]. The document data gives a picture of nine countries which use probation (Annex 3c).

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[81] Figures in Annex 5:
Figure 1. Induction for newly qualified teachers in the country
Figure 2. Institutions responsible for organising the induction phase for NQTs
Figure 3a. Importance of the role of experienced teachers in supporting and counselling the NQTs at schools
Figure 3b. Importance of the role of teachers of the same subject in supporting and counselling the NQTs at schools
Figure 3c. Importance of the role of head teacher/master teacher in supporting and counselling the NQTs at schools
Figure 3d. Importance of the role of the principal of the school in supporting and counselling the NQTs at schools
Figure 3e. Importance of the role of the staff from the TE institution in supporting and counselling the NQTs at schools
Figure 3f. Importance of the role of specially qualified mentors in supporting and counselling the NQTs at schools

[82] Probation and induction in different Member States according to the documents, see Annex 12c.

As an example, in Scotland, all newly qualified teachers are required to complete a period of probation to show that they meet The Standard for Full Registration. This is to ensure that all new teachers are able to take on the demands and responsibilities of teaching. In Scotland, there are two ways in which new teachers can complete their probationary period: the *Teacher Induction Scheme* and the *Alternative Route.*

Teacher Induction Scheme: provides a guaranteed one-year training post to every eligible student graduating with a teaching qualification from one of Scotland's universities. GTC Scotland[83], in partnership with the Scottish Government Education Department, is responsible for the administration of the scheme. The scheme is not compulsory, but it allows probationer teachers to be considered for full registration within one school year (190 teaching days). It offers a number of benefits, including:

- a maximum class commitment of 0.7 full time equivalent

- dedicated time set aside for professional development

- access to an experienced teacher as a nominated probationer supporter

Alternative Route: Probationer teachers not completing their probationary service on the Teacher Induction Scheme, or who decide to opt out of the Scheme, may complete their probation via the Alternative Route. It enables teachers who cannot commit to a full-time post to complete their probation on a part-time basis. It also enables teachers to complete their probation in the independent sector or outside of Scotland. The Alternative Route involves:

- supply teaching or completing temporary service in Scottish state schools

- teaching in the independent sector

- choosing to complete the probationary period outside Scotland

- gathering service in exceptional circumstances

The Alternative Route takes 270 days to complete.

In-service TE

In general, teachers' in-service training is provided in every Member State, although there are great variations in how it is provided and to what extent. The summary table on teachers' in-service education in the Member States according to the results of the document data of this study is in Annex 3d.

In this study, according to the questionnaire data, 94% of the representatives of different Member States answered 'Yes' to the question 'Do the primary and secondary school teachers have in-service education in your country?'[84].

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[83] See: http://www.gtcs.org.uk/Probation/probation.aspx
[84] The questions were asked separately for primary and secondary teachers.

There is much more variation in the organising of teachers' in-service training than that of initial TE; for example, in some of the countries it is optional whereas in others mandatory. In this study, 61% of respondents informed that they have obligatory in-service education for primary school teachers, which was a higher figure than for teachers (58%) at secondary level.

In some countries, in-service TE is required for teachers' professional promotion. However, although in-service education is obligatory for teachers, the amount required may be quite small[85].

Several actors are involved in organising teachers' in-service education. TE institutions organised teachers' in-service education more often than other providers, and it was hardly (not at all or to a small extent) organised at ministry level (Figure 9). As to implementing in-service TE, this is provided more often by TE institutions and universities, and not much by the Ministry and teachers' unions (Figure 10).
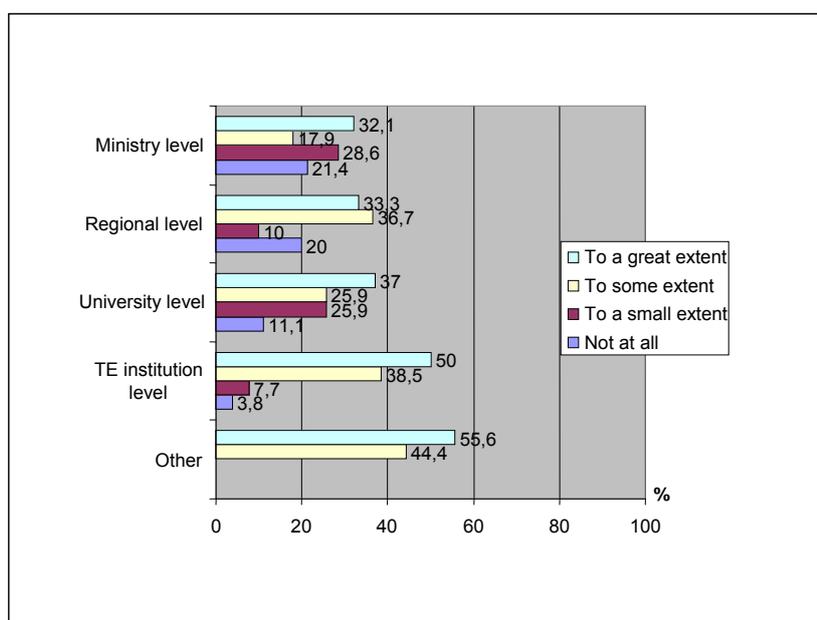
Figure 9. Levels of organising teachers' in-service education

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[85] See Table 2 in the Commission Communication 'Improving the Quality of TE (Annex 1 or http://ec.europa.eu/education/com392_en.pdf)
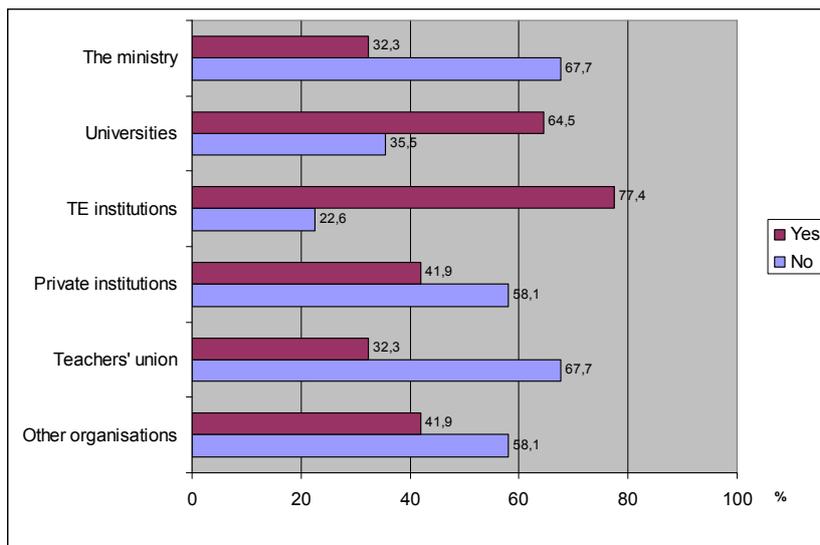
Figure 10.   Levels implementing teachers' in-service education

As far as the contents of in-service TE are concerned, TE institutions and universities have more often planned the contents, but other institutions have also been involved in planning them: the Ministry (yes = 45% of the respondents of the questionnaire data), private institutions (42 %), teachers' union (39%) and other organisations (39%).

Methods for analysing the educational needs of teachers' in-service education vary a lot. In this study, most of the countries (71%) had no standard method to determine the needs. However, some of the methods were listed in the open questions of the questionnaire:

- The principals of schools use diverse methods to determine teachers' educational needs
- Evaluation studies in the schools
- National study on evaluating organised in-service training
- Participating in the OECD study TALIS (Teaching and learning international survey)
- Observation in the school evaluation and accreditation process, questionnaires, interviews with teachers and principals of the schools.
- Group discussion reports, obligatory modules
- Annual enquiry by autonomous educational authorities to raise subjects they consider they need from a global point of view or on individual bases.

According to the questionnaire data, 38% of the respondents said their country / university / TE institution (depending on the background of the respondent) has an evaluation system for teachers' in-service education. Some of them mentioned were:

- Research commissioned by government and regulatory body
- Evaluation sheets to be filled in by the teachers after each in-service course
- Internal and external quality assurance in higher education according to ENQA standards and guidelines
- At individual level: teachers' self-evaluation
- At school level: school evaluation system
- At state level: experts and quality assurance agencies in school evaluation and accreditation process

- At research level: researchers from universities and research institutes to investigate different problems related to the quality of the TE system. Results of investigations are published in different ways: home page of Ministry, state agencies, scientific institutes, etc., in publications, in books, in scientific conferences, in further education courses, etc.
- Occasional attempts to assess the quality of teachers' in-service courses
- Standardised evaluation sheets
- Creating standards for how teachers' performance will be assessed
- Various methods: oral examination, portfolios, project research, applications, debates in groups
- Educational research on the subject
- Creating an evaluation method to assess the results and the effectiveness of teachers' in-service education, such as questionnaires and external evaluation methods

Continuing teacher education has a significant role in updating the professional expertise of teachers and principals, as well as in enhancing both personal well-being and the well-being of the work community as a whole. The teaching profession should be seen to develop along the continuum where continuous, self-directed learning, personal development, and development of one's own work and the work community make up a natural part of one's career from the outset. The professional development programmes enabling this process should, then, be based on holistic, broad and extensive personal and institution-specific development and in-service training plans. Also the governmental development plans in this field should be based on a holistic needs survey and evaluation of the effectiveness of professional development programmes. Such measures would help define the future points of emphasis in in-service TE[86].

In summary, according to the above-mentioned Finnish follow-up study concerning teachers' in-service education, the responsibilities within different organizations for organizing teachers' induction phase and in-service education should be clarified. Also the shortcomings of induction and in-service TE should be taken into consideration in organizing and planning their structure and contents. However, teachers' educational needs, e.g., skills and competences for their future career should be examined systematically. As well planning school-based and personal development plans for in-service TE should be supported by the educational policy makers and TE developers, something which would help to guarantee in-service TE

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[86]Mikkola, A. & Lähde, K. (eds.) 2006. Opettajankoulutus – tietoa, taitoa, tulevaisuutta. Opettajankoulutuksen kehittämisohjelman 2001–2005 loppuraportti. (Final report of the teacher training development programme.) Committee monitoring the follow-up to the teacher training development programme. Reports of the Ministry of Education 32.   Abstract in English on the Internet: http://www.minedu.fi/OPM/Julkaisut/2006/Opettajankoulutus.html?lang=fi&extra_locale=en

Piesanen, E., Kiviniemi, U. & Valkonen, S. (2006b). Follow-up and evaluation of the teacher education development programme 2005. Continuing teacher education in 2005 and its follow-up 1998-2005. University of Jyväskylä. Institute for Educational Research. Research reports 29. (English abstract.) Internet: http://ktl.jyu.fi/ktl/julkaisut/luettelo/2006/g029

Piesanen, E., Kiviniemi, U. & Valkonen, S. (2007). Follow-up and evaluation of the teacher development programme. Continuing teacher education in 2005 and its follow-up 1998 2005 by fields and teaching subjects in different types of educational institutions. University of Jyväskylä. Institute for Educational Research. Research reports 38. (English abstract.) Internet: http://ktl.jyu.fi/ktl/julkaisut/luettelo/vuosi_2007/g038

for different phases of the teaching career. In addition, induction and in-service TE should be evaluated to guarantee the quality of in-service education.

Defining TE curricula and organising TE in the Member States

- TE has been regulated mainly at national level.
- There are two kinds of models defining TE curricula: 1) Universities and TE institutes are mostly quite independent and act quite autonomously but receive guidelines and main rules from the Ministry level or 2) TE is organised autonomously in universities or in TE institutions without regulations from the Ministry. In federal countries the states more often regulate their own TE and provide the frames for the TE institute curricula. (Table 7.)
- Initial TE is organised mainly at university level according to the Bologna Process but the structure, duration (years), extent (credits/ECTSs) and contents of the cycles vary (Annex 3b). The Bologna Process has also influence on the skills and competences required in its first, second and third cycles. From the viewpoint of students' equality as well as opportunities for mobility, the competences should be transparent and listed in TE curricula.
- The way newly qualified teachers are supported varies between countries, some countries have probation for NQTs, some countries an induction phase, some countries have some combination of these methods (Annex 3c). Depending on the country, there are different competences required for NQTs.
- The responsibility for induction and in-service TE lies more often with schools, thus also for the skills and competences included in these phases. There was not reliable evidence of where the curricula for these phases is usually defined.
- Teachers' in-service education has been organised diversely. In most countries it is obligatory, although the amount varies, in some countries it is voluntary (Annex 3d).

4.6   Summaries of the case studies

The complete descriptions of the case studies are in Annex 8. This section provides a short summary of each description. These summaries include the essential contents of the case studies, e.g. skills and competences in TE, good practices, examples of the implementation of TE, description of the TE reform process, etc.

A.   Catalonia

Catalonia is an autonomous state in Spain. It has the responsibility for organising TE independently, although taking into consideration the law and other regulations stated by the Spanish Government. The teaching profession has been legally regulated by the law, e.g. all TE programmes consist of 60 credits regulated by the law, the rest can be planned in faculties in universities. The plans must be approved by the Spanish Ministry of Education.

As to teachers' competences, a change that began about five years ago in the mentality concerning teacher education in Catalonia can be noticed. This change can

be seen in designing teacher education curricula in which there has been a visible transition from aims, goals and objectives towards teachers' competences. Earlier, the study plans were based on contents and goals of the courses, nowadays they are based on teachers' competences. This has been a radical change in thinking. As a consequence of this change, all study programmes and plans in TE are nowadays competence based.

In universities, general, specific and transversal teachers' competences have been listed and one or several have to be in the curricula of every subject, not every one in all subjects but all the competences must be included in the programme. Some TE institutions additionally have some special competences and sub-competences. For example, there are universities in Catalonia, e.g. University of Barcelona and the private university of Roman L'lull, who have to include Catholic religious subjects in their TE curricula.

The Catalan authorities are taking into consideration the recommendations from the European Commission and the Spanish government and are trying to adjust the education to the recommendations of the EU documents. At the same time, they recognise the special needs of their own educational system and classes, their current societal problems and their own priorities. They are also trying to retain their own good practices and pedagogical traditions. Professionals are convinced that the plans developed should fit in with the school reality in a specific country.

B.   Estonia

In Estonia there is a National Development Plan for TE which the universities with their TE institutes apply. Teachers' skills and competences have been defined at national level, in the Estonian Standard of Higher Education accredited by the Estonian Higher Education Quality Assessment Council.

Teacher education in Estonia has developed considerably in the last decade. Currently, the country benefits from many European Social Fund programmes, for example the European Life Long Learning Programme "Comenius" in which Estonia is planning to identify quality criteria for in-service TE based on professional standards. According to the interviewees, Estonia has developed its TE very intensively during the last decade, by recognising the weak points of Estonian TE and how they could be improved. To a large extent, the country has taken into consideration European Commission documents in further developing TE. Nowadays TE in Estonia is competence-based. Teacher trainers and other teacher education professionals are acquainted with the European documents and the teacher competences are mentioned in documents devoted to TE.

TE professionals agree that the skills and competence clusters proposed by the European Commission are good on the general level. They are also presented in this way in all kinds of TE guidelines, but specified when implemented in TE. These specifications do not always suit every situation. For example problems may occur when determining, for example, exactly what pedagogic competences should be included, or how integrating theory and practice should be implemented in practical TE situations. The danger may be that teacher trainers do not pay enough attention

to the general ideas of the competences and when they specify them for their use, they determine them only using a few, perhaps inessential, aspects. The competences included in the EU text have been mentioned in Estonian teacher professional standards and they do, somewhat obscurely, reflect the framework guidelines for teacher education, but the difficulties relate to the interpretation of the competences.

However, it has been noticed that too little attention is paid to certain competence clusters, such as mobility or leadership. Furthermore, changes related to organising practice periods are considered to be necessary. According to some professionals, there is also a need for a more official evaluation system of TE in Estonia. Nowadays, evaluation concentrates solely on the induction phase. Finally, it has been recognised that teacher education is more challenging than before, thus necessitating more various specialists and support staff in Estonian schools.

C.   Finland

The Finnish TE is regulated nationally by general laws, but the universities which organise TE have institutional autonomy for TE curricula. This is why also teachers' skills and competences can be defined, if these are wanted to be included in the curriculum, at institute level. Thus, there is no national curriculum for TE in Finland and universities are quite independent in developing their own programmes.

The Finnish TE system is considered by some to be one of the reasons for students' good results in the PISA[87] [88] international comparative tests. There is strong agreement amongst educational policy makers that teachers need an academic education and that matters connected to TE should be a part of national HE policy[89]. TE in Finland concentrates on the Master's level and is research-based. A high-quality initial TE provides a very solid basis for the teaching profession. The skills and competences required for teachers in the initial TE prepare students for independent, analytic, professional thinking and contribute to the development of a high level of teaching ability. For the duration of the training students are encouraged to build their knowledge on their own. Subject didactics is an essential part of teacher training. Teachers enjoy considerable trust in Finland and are not evaluated after qualifying as a teacher. They work and make most decisions independently and are, for example, able to take part in planning the curriculum on school level.

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[87] Niemi, H. (2009). Why Finland on the top? Reflections on the reasons for the Pisa success. Paper presented at the 3rd Redesigning Pedagogy International Conference. June 2009. Singapore.
[88] Välijärvi, V., Linnakylä, P., Kupari, P., Reinikainen, P. & Arffman, I. (2002) *The Finnish Success in PISA – and Some Reasons Behind It.* Jyväskylä: Kirjapaino Oma.
Välijärvi, V., Linnakylä, P., Kupari, P., Reinikainen, P. & Arffman, I. (2007) *The Finnish Success in PISA – and Some Reasons Behind It 2. Jyväskylä*: Kirjapaino Oma. Internet:
http://ktl.jyu.fi/ktl/julkaisut/luettelo/vuosi_2007/d084
[89] Niemi, H. (2008a). The Bologna process and the teacher education curriculum. Portuguese Presidency of the Council of the European Union Conference 'Teacher professional development for the quality and equity of lifelong learning' Lisboa, 27-28 September 2007 Lisbon : Ministry of Education of Portugal, Directorate-General for Human Resources in Education, 50-67.

The universities decide on their own to what extent they will take European recommendations concerning TE into consideration. According to Finnish professionals, it is impossible to introduce all of these competences in initial teacher education programmes. Some of them are initially included in in-service courses. Developing teachers' in-service education is undergoing reform.

Thanks to the VOKKE project, higher education institutions have acquitted themselves quite well with regard to the Bologna declaration. The VOKKE project is a good example of cooperation between different professionals and TE institutions. Joint meetings organised within the project gave experts from the field of TE an opportunity to gather together, exchange experiences and discuss matters related to TE in the renewal of TE degrees in the Bologna Process. The project was also a way of making representatives of different TE institutions aware of the Bologna Process and its connections to higher education policy as well as of the skills and competences which should be required for teachers.

Specialists agreed that all TE institutions should follow common guidelines in TE programmes. Additionally, all programmes should have some minimum amount of practice and research methods. It was also pointed out that more multicultural issues are needed in TE. Although all of these decisions are only a set of suggestions, the common opinion among the TE authorities is that TE institutions are willing to follow them because they are the result of joint discussions and agreement. However, as the competences are determined at university level, as will the decisions about whether they must be mentioned in detail in the TE curriculum of each TE institution or not, precise information on the extent to which the competences have been taken into consideration in them is not available.

The programme 'Teacher education 2020[90]' assessed the future needs for TE in Finland and presented needs for changes in the sizing and the structures of TE. As to teachers' skills and competences, an essential factor is changes related to multiculturalism. Concrete proposals concern, for example, the TE volume transfer from Northern and Eastern Finland to the Helsinki region, more multicultural issues in initial and in-service TE, more education for teachers with an immigrant background and more immigrant education in TE, developing the continuum in TE and strengthening research-based TE. Thus, the Ministry of Education wants to especially strengthen the TE research base and multiculturalism.

Finnish TE has been assessed systematically several times nationally and internationally. On the one hand, Finland has a good TE system; on the other hand, there is still potential to improve it[91]. For example, in-service education will be reformed. Finnish TE policy makers recognise that teacher competences have to be constantly rethought and adjusted to societal changes. For this reason, there is need for a good system of in-service education. One problematic area in Finnish teacher education is also the induction phase. In spite of very good initial teacher education, universities seldom produce ready teachers. Therefore, it has been

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[90] See http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2007/liitteet/tr44.pdf?lang=fi (in Finnish)

[91] Niemi, H. (2008). Research-based teacher Education for teacher's lifelong learning. In *Lifelong Learning in Europe* 1/2008, 61-69.

noticed, also in Finland, that novice teachers should be supported in their first working year. In addition, although the teachings profession is seen to be attractive, the lower the stage where the teacher is (e.g. in primary school), the fewer male teachers there are.

D. France

In France TE is organised and also the TE curriculum defined at national level. Regulations are applied at the TE institutes (IUFMs), also according to the skills and competences determined for the teachers at national level. Till recently, the IUFMs have functioned as autonomous institutions depending on regional educational authorities (= academies). In 2005, the French government passed a new law[92] stressing the importance of the university level of TE. Therefore, it was decided to integrate the IUFMs into the universities and to adapt the teacher education system to the challenges of the Bologna Process. Initial TE will be constructed according to the two-cycle model and all future teachers will be employed only if they have a Master's degree.

At present, French institutions continue their progressive development[93]. Many positive developments can be observed in TE in France. Previously only secondary school teachers had a university preparation, even if it only concerned the subject taught. Since 1990 teachers, both primary and secondary, have been trained in the University Institutes of Teacher Training. Most recently, the majority of the IUFMs became part of the universities.

Nowadays, primary as well as secondary teachers have the same level of training and in consequence also the same salaries. Thanks to the creation of IUFMs, there is more balance in TE between subject and pedagogic content, as well as between theory and practice. Currently universities are working on developing new Master's degrees in Educational Science. Recently a two-year period of induction for newly qualified teachers has been introduced.

In spite of the fact that the French system can sometimes be difficult to change, it was possible to introduce and implement a few significant reforms. At present, there is more collaboration between universities and IUFMs, and more teaching practice during the TE in IUFMs.

French professionals have recognised some areas in TE that need further development. For example, there are many defects regarding in-service education. TE in France is not necessarily seen as a continuum. In-service education is not compulsory and recently lifelong learning issues have even reduced teachers' in-service education.

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[92] Loi d'orientation et de programme pour l'avenir de l'école du 23 avril 2005 (JO n° 96 du 24 avril 2005)

[93] In October 2008 the main actors of TE, universities and IUFMs, had to propose their "Maquette", programmes, for a Master's degree in TE, prepared as carefully as possible.

As to skills and competences, the other questionable matter is connected with collaboration and co-operation. Traditionally teaching is seen as a very individual profession and there is not that much collaborative activity. It has been noticed, however, that this field needs to be improved. There is also ongoing discussion concerning the balance between subject and pedagogic competences, and the integration of theory and practice. Teaching pedagogy also seems to be a problematic aspect in TE. Pedagogy is considered very often as something that can be learnt through practice.

TE in France has a consecutive character. The first three years of studies concentrate on subject knowledge. Then students are prepared for the teaching profession during two-year studies in the IUFMs. The other particularity of the French system is the recruitment of teachers, which is the responsibility of the state.

E.   Italy

The minimum requirements for teachers in Italy are defined nationally, but the universities with their TE units define their curricula and their contents autonomously. TE in Italy is currently being rethought. Some areas that need improvement have been identified, such as in-service education. At the moment, the state does not finance continuing education and in-service courses are not compulsory.

As to the competences mentioned in EU texts, there was consensus between different interviewees that at a general level, most of them are important, but there is variation in the way they are implemented in TE in specific teaching situations. For example, the competence of supporting students autonomous learning was seen to be very important, but the difficulty might be how this is supported in a specific context. However, leadership was one of the competence groups which has not been supported very much in TE in Italy.

According to some interviews, teachers in Italy experience various kinds of problems with competences. One is the fact that although new competences are included in TE curricula, tradition regulates their implementation: Teachers, when beginning their teaching profession in schools, apply the teaching traditions the school has, and not perhaps the competences which modern TE includes, if any. So, although the Government amends former TE curricula, it is not very effective in practice. There have also been problems with timing, for example, with regard to when TE curricula, as well as the curricula for schools, should come into force because the schedule has not been realized on time.

The Bicocca TE model can be seen as an example of good practice for others. The TE model where universities and schools have been connected by means of supervisors[94] who work with student teachers during the school practice period, has

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[94] Supervisors for School Practice are for Laurea and for Graduate School. They are teachers who are still in service; their teaching duties are halved, in order to give them time to participate in University activities. They are appointed through public selection, both the University and the School Administration being part of the selection Committee. The appointment is for 2 years and may be renewed for 2 more years (almost always used), after 4 years it cannot be renewed without a 4-year interruption. The part-time nature of the appointment has been established in order to have persons

proved to be very successful in bringing the schools and universities closer. In Milan Bicocca TE has adopted this model which supports e.g. competences concerning co-operation and collaboration – competences which otherwise have been applied minimally in Italian TE. The co-operation has succeeded in serving the universities, the student teachers as well as the schools. The university also uses innovative methods in TE. Preparation of future teachers takes place in so-called laboratories - the experimental learning courses that are provided for small groups in which students are encouraged to think about teaching and learning as well as to communicate with others. Various persons collaborate in preparing students for the teaching professions. At the university students are guided by the supervisors and in schools they can get support from the tutors. Additionally, the process of learning and gathering of practical experience is accompanied by observation and reflection.

F.   Romania

In Romania the Ministry has set the guidelines for TE which the universities interpret. Teachers' skills and competences have also been defined within a national qualifications framework with which the universities comply.

During this decade, Romanian TE has faced many challenges. One challenge has been, for instance, creating standards for teacher profession, the minimum requirements needed for obtaining qualifications for all teachers. A new government came into power in 2009 and its most important task connected with TE has been to prepare national standards for teacher education. However, Romania has nowadays a lot of TE development projects as well as strategies. The TE strategy which defines TE standards and the structure of initial TE has also been appreciated at the level of the European Commission.Traditionally, there has not been any structure for in-service TE, but nowadays there is, because Romania has been changing its philosophy with the result that every five years teachers have to receive 90 credits worth of teachers' in-service education. CNFP, the National Centre for Staff Training in Pre-University Education, was launched in 2001 to carry out teachers' in-service education. One of EC programme, the PHARE project, is the first project in Romania that focuses exclusively on teacher continuing training and especially in rural areas. The project was developed and is being implemented by the CNFP.

The role of the CNFP is to ensure the quality of Staff Training programmes in Pre-University Education based on national standards and training policies. The CNFP's mission is to ensure the quality and diversity of the in-service training offered to pre-university teaching staff through accreditation, monitorization and evaluation of training programs. For teachers' in-service training programs, the Specialized Committee for Accreditation has established transferable professional credits based on the category, type and duration of the programme.

All the TE recommendations given by the Commission have been welcomed at the level of Romanian strategies and documents. The Commission launched 'The

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who still teach in classrooms. The maximum of 4 years is meant to give more teachers a chance to have this opportunity, avoiding the risk of creating a closed group of superteachers, isolated from their colleagues. (Luzzatto 2002.)

Common European Principles for Teacher Competences' which has been an important cornerstone of the TE system at the European level and likewise in Romania.

However, the weak point in the Romanian TE system is probably the lack of an induction process. It has been recognised that induction programmes are necessary for teacher motivation. At present teachers have direct entrance into classrooms and they have inadequate training for in classroom management. The ability to work e.g. with pupils with special needs and with pupils coming from multicultural environments is an important qualification. The teaching profession is becoming more demanding and a limited initial university TE is not enough to cope with all problems that can appear in the classroom.

G.   Scotland

Scotland is an autonomous state in the United Kingdom and organises and regulates its TE as well as defines teachers' skills and competences with the assistance of Teaching Council for Scotland but takes account of the general laws and regulations coming from central government in the U.K.

There are many trends in the Scottish system comparable to those present in other countries. There are some attempts to make teacher education programmes more Bologna Process comparable. Furthermore, Scotland has to a large extent adopted the European recommendations concerning teachers' competences, although they were in use already before the Council Conclusions. Scotland, however, does not use precisely the same concepts as in the EU texts. Instead, the country has developed its own system of standards for teachers.

The General Teaching Council for Scotland was one of the first teaching councils in the world. It is an important regulatory body, whose task is the implementation of government's TE policy. Its main task is to maintain a register of teachers who are qualified to work in schools. From that stem various other roles such as being the 'gate keeper' to the teaching profession, determining who may become a teacher and also the profession's legal body, removing from the Register of Teachers people who are dishonest, behave inappropriately or are incompetent. This implies that it will have a say in setting and governing the standards for entry, etc. The GTCS is responsible, among things, for preparing the standards for teacher education, accreditation of teacher education programmes, registration of teachers qualified for the teaching profession, and implementation of probation. The accomplishment of standards proposed by the GTCS is the focal factor leading to approval of teacher education courses.

The Scottish Teacher Induction Scheme and mentoring system can also be considered as good practices. The OECD commented in December 2007 that 'Scotland's approach to teacher induction is world class.[95]' All students who graduate from teacher education programmes and register with the GTCS are entitled to a

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[95] OECD Reviews of National Policies for Education: Quality and Equity of Schooling in Scotland. (2007).

one-year probation period in a public school. Induction gives the novice teachers a chance of practicing their future profession under the supervision of an experienced teacher.

It is also worth mentioning that teacher education is Scotland is seen as a continuum. The country has succeeded in putting this idea into practice. This continuum starts with enrolment in an initial teacher education course, has its extension in the induction phase and then lasts through the whole of a teacher's professional life. During their career, teachers are supposed to complete relevant standards and take part in the ongoing process of Continuing Professional Development.

However, professionals working on developing TE see the importance of adjusting TE courses to the changing society. The process of developing teacher education should be accompanied by ongoing reflexivity and self-evaluation. Teacher education curricula are changing and becoming more inclusive and probably more attractive for creative people. Since the late 90s there has been a noticeable change in the approach to teacher education. It is recommended that there should be less emphasis on discrete subjects and expository methodology. Instead, more activity is needed in teacher education. These new trends reflect changes concerning TE that have happened in other European countries.

The new Curriculum for Excellence[96] for schools has had an impact on TE. More attention is paid to children's needs and how teaching takes place in schools. Nowadays, the teacher's professional knowledge is applied more to what curriculum is offered to children. According to the new curriculum for schools, students should be taught in a more integrative way. It is believed that this allows them to better connect the issues that they learn. Some teacher education programmes, for example, at the University of Edinburgh, are designed in such a way that student teachers can experience an integrative type of learning.

G.   Conclusions concerning the case studies

The interviews made in the selected case countries proved to be one of the most fruitful data collection methods in the study. The reasons for this are, first of all, the fact that the TE situations concerning TE curricula and other documents in different Member State vary a lot, and secondly that reliable data collection with a questionnaire is not possible with a limited target group, as in this study.

The selected case countries represented different kinds of Member States (Table 5). The interview data collected from these countries revealed that there are many similarities but also a huge variety in policy making and methods between the countries.

In all case countries, TE has been politically in focus one a way or another. Developing TE has been a common concern in educational policy making. In these cases, improving initial TE as well as the induction phase and teachers' in-serving education has been paid considerable attention. In these countries teachers' skills

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[96] http://www.ltscotland.org.uk/curriculumforexcellence/index.asp

and competences have also been discussed and taken into consideration in TE curricula and other documents. On the other hand, in some countries, TE is nowadays one of the main targets for development in HE. This is the situation especially in countries where developing HE according to the Bologna process is still undergoingreform, as for example in France.

Catalonia and Scotland have also developed some unique ways of organizing TE. In other countries the way the TE system has been organized and developed depends on the relationship between the common policy making system and TE developers.

The general discussion that has arisen in various countries – also according to the efforts of the Commission – has concentrated mainly on the quality of TE and how to guarantee it. In several countries the politicians have been paying attention to TE with a view to improving its quality by various political methods. This has become obvious when observing that TE reforms are going on in many countries. These reforms concern the organizing and planning of TE, but also the curricular issues and the responsibility that different bodies have in the process. The reforms are partly problematic because of different political emphases on TE.

4.7 The main findings of the results

The results of this study have revealed the overall situation of TE: *Organising, defining TE curricula and skills and competences required for teachers and where they are determined vary in EU Member States.* There is evidence of this kind of situation also internationally. For example, a comparative study which compared TE in England, Scotland, Northern Ireland, Finland, New Zealand, Singapore, USA and Poland, has shown that standards across different countries vary in how they describe teachers' work, with different emphases on various aspects. Some countries adopt extensive lists of competences while others adopt far more generic statements. Moreover, the uses to which standards are put vary across countries with a different balance between developmental and accountability functions. Accountability is more pronounced in countries where concerns have emerged about the quality of student teacher intakes, retention within the profession, and where there is an emphasis generally on the close monitoring of nationally-set targets right across the social sector.[97]

The discussion of teachers' competences is also closely connected to *the attractiveness[98] of the teaching profession:* On the one hand, how much the teaching profession is respected in the society by policy makers and authorities, and, on the other hand, how much by other actors, parents, local authorities and teachers themselves. The attractiveness consists of' different aspects, besides teachers' salaries; there are also many other factors behind it, e.g., what kind of working

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[97] E.g. Conway, P.F., Murphy, R., Rath, A. & Hall, K. (2009) Learning to teach and its implications for the continuum of teacher education: A nine-country cross-national study. Report Commissioned by the Teaching Council. University College Cork. Internet: http://www.teachingcouncil.ie/_fileupload/Publications/LearningToTeach-ConwayMurphyRathHall-2009_10344263.pdf

[98] OECD (2005) Teachers Matter. Attracting, Developing and Retaining Effective Teachers.

conditions teachers have, what kind of respect teachers get from principals and other colleagues, from parents etc. However, the attractiveness of the teaching profession also depends on competences teacher students are supposed to receive in TE and in-service education. In addition, the attractiveness also depends on how they will be supported in the induction phase and what kind of possibilities future teachers have to develop themselves during their teaching career, etc.[99]

In many respects these factors also influence the situation of how society is able to deal with *teachers' recruitment problems*[100]. These problems are connected to various kinds of questions, e.g. what are the factors which influence the decision to become and to remain a teacher and what are the reasons for which teachers leave their jobs and choose another profession.

However, in the future, the attractiveness of the teaching profession will depend on different 'new' factors. The contents, skills and competences of TE must follow the demands of the modern teaching profession, e.g., *leadership issues* consist of professional factors, how to direct organizations, schools, etc., but also the ability to direct their own student groups. Supporting *mobility,* both international mobility and geographical mobility, is also one means to increase the attractiveness of the teaching profession. In addition, supporting *teachers' independence* and opportunities to influence their own teaching in schools would also improve the attractiveness of the profession. There are, however, numerous measures for policy makers to influence the attractiveness of the teaching profession also by supporting teachers' mobility[101], but it should be kept in mind that all these methods need special skills and competences, which should be taken into consideration when planning teachers' initial and in-service education.

The above-mentioned issues are *connected also in many ways to TE curricula*: How and to what extent the competences have been determined in the curricula and other TE documents so as to be transparent for young people who plan to become teachers.

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[99] See e.g. Eurydice (2008) Levels of Autonomy and Responsibilities of Teachers in Europe. European Commission. See http://eacea.ec.europa.eu/ressources/eurydice/pdf/0_integral/094EN.pdf

[100] Sultana, R.G. (2002) Attracting recruits to the teaching profession. See http://www.cedefop.europa.eu/etv/upload/etvnews/news/2131-att1-1-ronald_sultana.doc

[101] European Commission (2006) Study on Key Education Indicators on Social Inclusion and Efficiency, Mobility, Adult Skills and Active Citizenship. Lot 2: Mobility of Teachers and Trainers. Final report. See http://ec.europa.eu/education/doc/reports/doc/mobility.pdf

5   CONCLUSIONS AND RECOMMENDATIONS ON TE POLICY

5.1   Conclusions

The aim of the study 'Teacher Education Curricula in the EU' was to assess the extent to which TE curricula in different Member States currently provide teachers with the knowledge, skills and competences referred to in the Commission Communication 'Improving the Quality of TE', and in the related Council Conclusions[102].

The main research questions were: What kind of skills and key competences are mentioned in the curricula and other TE documents in the EU countries, and to what extent do the TE curricula of these countries provide teachers with the knowledge, skills and competences referred to in the above-mentioned EU documents.

The following conclusions and recommendations are based on the above-mentioned composite data and would comply with three specific objectives of the contract:
1) To assess the extent to which current provision for initial and in-service Teacher Education provides teachers with the knowledge, skills and competences set out in the list subsequently agreed between the Commission and FIER.
2) To provide the Commission with a systematic and comparative overview, highlighting areas of good Teacher Education policy in these areas.
3) On the basis of these analyses, to draw conclusions on the best Teacher Education policies and make recommendations for further action.

5.1.1   Definition of competences required to work as a teacher

There is very much variation between countries concerning how and to what extent, if at all, the skills and key competences for the teaching profession are mentioned in TE curricula and in other TE documents. However, the study revealed that many of the skills and competences mentioned in the Commission's documents concerning the quality of TE have been included in most Member States' TE curricula or other TE documents in one way or another, but there is considerable variation in the concepts used and in the extent they are used.

As noted in the Section 4, skills and competences may not have been written down 'officially' in any document, but they have still been somehow included in TE when implementing the curricula. Ultimately the teacher trainer in her/his lectures or classes given in universities or TE institutions, or in the practical training provided in schools, is responsible for the multifarious contents of the teaching. This is partly because many of the skills and key competences referred to in EU texts are quite general, such as subject or pedagogical competences, integrating theory and

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[102] The Commission Communication 'Improving the Quality of TE (Brussels, 3rd Aug. 2007) (http://ec.europa.eu/education/com392_en.pdf)
The related Council Conclusions (Brussels, 26th Oct. 2007)
(http://register.consilium.europa.eu/pdf/en/07/st14/st14413.en07.pdf)

practice, which must necessarily be included in TE. The competences that are least commonly dealt with in national documents are those included in this study's categories of quality assurance, mobility and leadership.

It also became very obvious that different phases of TE, initial TE, induction and in-service TE are treated very differently in TE documents. For example in-service TE was hardly mentioned at all in the documents and only in a few TE documents were there skills and competences highlighted which should be taken into consideration when planning contents, methods, etc. for teachers' in-service education.

The way competences have been stressed in national TE documents is also partly culturally bound, due to the cultural differences between the Member States. For example, among some new members (e.g. Estonia), TE has been more often developed according to the European recommendations whereas the old Member States seemed to be willing to plan their TE more independently. This kind of culturally 'old' countries with strong policy makers include, for example, France, Italy and Spain. Their TE reform process has more often proceeded slowly whereas in some new Member States the reform of TE has been tackled more quickly. However, it must be noticed that some politically earlier quite separate countries still have some of their own traditions which continue to influence their TE in one way or another, e.g. the former Soviet countries, suchas Latvia, Lithuania, partly Estonia, or countries which have been under the Soviet Union's strong influence, such as the Czech Republic and Romania.

Concerning the level at which key decisions are taken about the competences required to be employed as a teacher, three basic models exist. However, it must be noted that the results also revealed that even inside one country there are a variety of models concerning the level each TE institution implements the law or regulations prescribed at national level. This is partly due to the level at which this process is controlled and evaluated by the ministry, etc. Because this variety cannot be comprehensively revealed by the results of this study, the countries mentioned here are as examples of each model according to this study. To obtain a more comprehensive view of the situation in one country a more detailed study would be required, e.g. information about different TE institutions in each country.

The three main models are:

1. The competence requirements are set in detail at national level (or, in federal states, at regional level), e.g. by a ministry or other government body;
    this is the case in 5 countries, namely:
    Cyprus, Estonia, Germany, Slovenia, UK.

2. The competence requirements are set in outline at national level (or, in federal states, at regional level), e.g. by a ministry or other government body, but are adapted or further defined at a lower level, e.g. by a Teacher Education Institution;
    this is the case in 18 countries, namely:
    Austria, Belgium, Bulgaria, Denmark, France, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden.

3. The competence requirements are set at a lower level, e.g. by a Teacher
    Education Institution;
    this is the case in 4 countries; namely:
    the Czech Republic, Finland, Greece, Malta.

In addition, there may also be 'a fourth model', a model without any mention of competences in TE documents. However, according to the results of this study, countries, universities or TE institutions without any clear definitions of the teaching competences required for teachers cannot be explicitly identified. So, the data has revealed that competences are mentioned at some level, but the concepts used differ.

Those countries where national teaching bodies, under ministries or governments, (e.g., Teaching Councils) that develop, accredit and evaluate TE programmes, or that control entry to the teaching profession, tend to have more explicit and more detailed descriptions of the competences that teachers are required to possess. This is the case, for example, in these six countries: Estonia, Czech Republic, Germany, Ireland, Slovenia, U.K. In those countries where the responsibility for TE curricula and their implementation is in separate TE institutions with more freedom in their planning and implementation, the definition of competences is more diverse.

Competences referred to in the EU text and in national documents

The extent to which the competences are referred to in the EU texts and also referred to in national (governmental) documents varies quite a lot between countries. There are Member States that have defined at national level some or all of the competences mentioned in the EU text that are required to be a teacher, or some or all of the content of initial TE curricula.

The following competences are included in all Member States' TE documents: subject competences, pedagogic competences and integrating theory and practice. Competence groups such as quality assurance, mobility, leadership, continuing and lifelong learning as teachers' competences are less common, both in primary and secondary TE curricula. However, according to the questionnaire data, 'continuing and LL', for example, has been taken into consideration quite well, but this is not the situation especially in some case countries, although quite many interviewees emphasised that it should be one of the competences teachers should have.

According to the results of this study it cannot be shown that there are some competences which are not included in the Member States' TE documents. It is clear that in those countries which say competences are not mentioned in national TE documents, such as Finland, the curricula in different TE institutions would probably show that they have taken all the competences mentioned in the EU documents into consideration, although some of them, such as mobility, leadership and continuing and lifelong learning, are less prominent than, for example, pedagogical competences.

It should also be noted that there are differences between primary and secondary TE in the importance attached to subject competences, pedagogic competences, integrating theory and practice, co-operation and collaboration and quality assurance. For example, pedagogic competences were seen as more important in primary TE than in secondary TE.

Competences referred to in EU texts and in documents on university or TE institution levels

Generally, mostly subject competences, pedagogic competences, competences concerning integrating theory and practice and quality assurance were mainly determined at the national level, others were taken into consideration at university or TE institution level, if at all.

However, on the basis of the data it is not possible to give any precise results for each Member State as to whether competences are mentioned in national level TE documents or at TE institution level or whether they are mentioned at all. But according to the results, competences (precisely as prfesented below) have been mostly mentioned in the curricula of TE institutions.

5.1.2   Definition of TE curricula

Definition of initial TE curricula

In principle, initial TE curricula have been defined both at national and at institutional level, or only at institutional level. In fact, according to the data, there was no country where TE curricula are defined only in a centralised way at the national level.

In federal countries (e.g. Austria, Germany, Spain and UK) the states usually have their own TE jurisdiction, although the frameworks are determined at national level.
Thus, concerning the level of decision-making at which key decisions are made about the content of initial TE curricula (whether described as topics to be covered, or as learning outcomes), two basic models exist:

   1)   In almost all, in 24 Member States the national documents, laws and regulations provide general guidelines and frameworks on how TE has to be organised in TE institutions, with the institutions designing their TE curricula quite independently.

   2)   Only in three countries, Greece, Luxembourg and Malta, are the TE institutions quite independent and define the structure and the contents of ITE curricula autonomously.

However, as far as students' equality as well as mobility opportunities are concerned, the skills and competences required at different levels of TE (e.g. at first, second and third cycle of the Bologna Process) should be transparent and listed in the TE curricula.

Definition of TE curricula in induction and in-service TE

Concerning decisions about the content of curricula for other phases of TE, the situation is quite problematic with regard to decisions on curricula for induction and in-service TE.

From the results of this study no reliable picture of the situation in different countries has emerged. Even organising induction or in-service TE seems to be arranged very heterogeneously and it is not obvious how the curricula for these phases has been determined and what the contents of the courses are, or even what teachers' needs are at these phases in different countries. A more focused study method is required to find answers to these kinds. One example of the definition and contents of teachers' in-service education is Lithuania, which is described in Section 4.4.2.

In principle, schools which are mainly responsible for providing mentoring in the induction phase or for planning and implementing in-service education for teachers also plan the contents of the education. This also involves deciding what kind of teachers' skills and competences should be supported and improved in induction and in-service TE.

5.1.3   Organisation of Teacher Education

Ultimately, in every Member State the government regulates in one way or another what kind of role TE has inside higher educational policy making in the country. Consequently, there are different ways of organising TE in the country. Almost all countries mention TE in their legislation (e.g. definitions of academic degrees, applying the Bologna Process to the degrees) or provide the frameworks or main rules for organising TE in TE institutions, either totally or to some extent. There was no evidence of any Member States where neither the government nor a government agency gives any guidelines about how TE should be managed. There are different kinds of combinations concerning organising TE. Although it is laid down that TE curricula are to be constructed in autonomous TE institutions, the organisation of TE seems to be more complicated. It appears that also in cases where there is quite a high level of institutional autonomy, some guidelines do come from the upper level, and if not from national level, then most probably from university level.

5.2   Recommendations on TE policies

On the basis of the analyses of the 'Teacher Education Curricula in the EU' project, the following conclusions on the best Teacher Education policies have been drawn and, according to them, certain recommendations for further actions have been proposed.

The role of the European Commission in this field is mostly to encourage the Member States to co-operate and interact with each other to improve the quality of TE in each country. Communications and recommendations made by the Commission will encourage Member State TE policy makers and developers to discuss teachers' skills and competences in their own country and to make increasing use of the same concepts to enhance common understanding with each other. This is one of the main instruments for promoting discussion about teachers' skills and competences in TE in Europe. According to the results of this study, one of the main recommendations is that it is obvious and essential to continue the work of the Commission to strive hard to improve the quality of TE and to shed light on the skills and competences of TE in the Member States.

In many countries there are key persons, TE experts, who have been involved in developing TE, not only in their own countries but also internationally, especially at European level. There are also persons who have even been in close contact with the EU and its communications and documentations and who have tried to work towards applying the recommendations to TE in their own country. Thus, they have either been in the developing process of the documents in question, or have been able to familiarize themselves with the recommendations and thoughts behind them in advance, later introducing them when developing TE in their own countries. Already now, this discussion and work within developing TE has activated, directed and guided the actors to strive towards a better quality of TE.

To encourage these persons to continue their work in consulting, co-operating, discussing, organizing meetings, etc., it would be very useful to stimulate discussion between different actors, not only at government level but also at grass roots level. Developing TE also requires that teachers and school principals commit themselves to this process, for example by becoming involved in in-service TE where the above mentioned themes would be included as the contents of a course. This would also bring out the need for discussion and planning with authorities and with each other.

The process of improving TE has started in all Member States. However, this process has started using different methods in different countries and is at different phases. In many countries possible TE problems have become more evident after they have paid attention to TE and the skills and competences needed by modern teachers and after they have discussed them nationally and in a European context. However, TE is often politically a critical area in most countries and therefore the TE decisions must be respected in the light of policy making in autonomous Member States.

Encouraging common understanding

The role of the Commission is mostly to encourage the Member States to co-operate and interact with each other to improve the quality of TE in each country. However, many of the European texts concerning teachers' skills and competences have been presented at a quite general, abstract level. It would be challenging to discover how and with what focus the competences could be expressed so that in different countries *the common understanding would be congruent.*

Commission Communications and recommendations will certainly *encourage the TE policy makers and developers of the Member States to discuss* teachers' skills and competences, not only within their own country but also to increasingly use the same concepts to enhance communication with each other. *This is one of the main influences determining the promotion of common understanding in the European Area as to TE policy.* Apart from political bodies, discussions also take place in the states in conferences and seminars, in different kinds of TE working groups, etc. Developing and reforming TE is possible only through wide discussion with all the actors in the field.

First of all, *the skills and competences must be relevant for the present and future teaching profession.* This can be guaranteed by stimulating wide-ranging and continuous discussion among TE experts in order to observe and identify the main competences which should be required of teachers now and in the future. This discussion should be permanent and seen as a continuous process to improve TE in Member States. Furthermore, not only TE experts but also teachers themselves should be given opportunities to take part in these discussions, which would *influence teachers' attitudes* towards the skills and competences teachers understand they need in their everyday teaching work in schools. This would also encourage teachers to take part in teachers' in-service education during their teaching career.

Sharing the best practices

This study has also brought out that in Member States there is a multiplicity of means to improve TE which countries have implemented. Some of these concern implementing a teachers' induction phase or in-service education for promoting the continuum of the teacher's career. Some good practices were seen in the implementation of TE in universities and other TE institutions, e.g., how to integrate theory and practice in TE effectively. *Good practices in these areas would also be a source of ideas and advice for policy makers when modifying the TE system in different Member States, if needed.*

A very noteworthy result is that *the differences between countries can be seen as an enrichment*, from which other countries could discover whether modes and methods could be made known to a wider forum. One way for this is to instigate co-operation at TE political level but also between TE actors, for example, by identifying good practices. *To encourage and to enable this discussion there should be different kinds of platforms for effective sharing.* These different kinds of platforms and means to share experiences could also be important targets in future development projects.

The role of policy making in TE

According to the results, it seems that the extent to which skills and key competences are mentioned in TE curricula and other documents depends mostly on *the educational policy system and its policy makers, governments, etc., and how they regard TE and how they want to develop it in their country.* Although this should be obvious for policy making in every country, there are differences in the extent that TE is concerned.

However, in some countries, TE is politically at the very centre of attention and will be changed in line with all political changes in the country. By contrast, in some countries the strategic outlines and goals set for TE are more permanent and only a few, if any, changes will be made to TE, even if there is a change in governmental power or TE programmes. Results related to these issues were apparent especially in the case studies carried out in Member States with a different cultural background. The results revealed that in the end, the policy makers are the key actors when deciding how many resources – both economic and human resources – they are willing to devote to TE with a view to improving the quality of TE in the country. There are different reasons behind this.

First of all, there is the question of the teaching profession itself. The teaching profession has experienced considerable change and this has also affected TE, which has been in transition for a long time[103] [104]. Furlong et al. (2000, 163) have stated that '… proposed changes to the education system are being closely integrated with proposed changes in both initial and in-service TE...' They continue: 'Systemic change in education, including TE is a transnational phenomenon… '. The changes are due to the changes in the surrounding society with all the consequences it entails. Today, and in the future, teachers need both 'traditional' skills and competences, but also competences which are tied to changes in social relations, problems in schools and homes, emigration, etc.

Teachers' life–long learning and the attractiveness of the teaching profession

An additional challenge facing teachers are changes in their career development. A broad trend towards life-long learning means that changes in the teaching profession will increasingly be *changes because teachers will be transferred from working with children and young people to working with adult and mature students*. This new career can be seen either as an end point or as a gateway to further new opportunities.[105]

The fact that participation in higher and adult education is continuously increasing[106] should also be taken into account *when planning initial teacher education as well as in-service TE, along with the skills and competences included in them*. Also *teachers working with adults and mature students* should have skills and competences for

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[103] Furlong, J., Barton, L., Miles, S., Whiting, C. & Whitty, G. (2000). Teacher education in transition. Re-forming professionalism? Open University Press: Buckingham.

[104] Vuorikoski, M. (2007) Life History Research Challenges Teacher Professionalism. In Rinne, R., Heikkinen, A. & Salo, P. (eds.) Adult Education – Liberty, Fraternity, Equality? Nordic views on life-long learning. Finnish Educational Research Association. Research in Educational Sciences 28, 203-220.

[105] Almiala, M. (2008) Mieli paloi muualle – Opettajan työuran muutos ja ammatillisen identiteetin rakentuminen. University of Joensuu. Publications in Education 128 (Doctoral thesis). See: http://joypub.joensuu.fi/publications/dissertations/almiala_mieli/almiala.pdf
 [Abstract in English, see:
http://joypub.joensuu.fi/publications/dissertations/almiala_mieli/abstract.html]

[106] See e.g. Osborne, M., Gallacher, J. & Crossan, B. (eds.) (2007) Researching Widening Access to Lifelong Learning. Issues and approaches in international research. New York: Routledge.
Tomas, L. & Quinn, J. (2003) International Insights into Widening Participation: Supporting the Success of Under-represented Groups in tertiary education. Final report. Straffordshire University.

utilizing diversified pedagogy and andragogy[107]. Thus, teachers should be able to utilize adults' capacity for experimental learning, that is, to reflect in their learning their earlier working or other experiences. On the other hand, the experiences teachers have encountered when working in schools should be taken seriously when planning the contents of teachers' in-service education. In future research projects, these skills and competences concerning adult education and teaching mature students should also be taken into account in TE throughout the continuum.

One other noteworthy result of this project was especially the way TE policy makers have taken the TE continuum into consideration in respect of life-long learning when developing TE in the country. The continuum - initial TE, induction and teachers' in-service education - are elements in TE policy which also define the way and the extent to which recommendations concerning teachers' skills and key competences have been taken into consideration in TE. Recognizing the fact that initial TE cannot include all the competences teachers will need during their whole teaching career is the key component in understanding the significance of the continuum.

Recommendations for TE policy making

- Raise discussion concerning effective TE regulation policies
- Raise discussion concerning teachers' skills and key competences to gain a common understanding of them
- Create a platform for effective sharing
- Share the best TE practices
- Emphasise and support the role of key experts in developing TE
- Emphasise and support the role of teachers and other TE actors in developing TE
- Emphasise and support teachers', teacher trainers' and teacher students' mobility
- Increase the status and the role of TE in HE policy making
- Support research based education in TE
- Support interaction between theory and practice in TE
- Ensure resources for all three cycles in TE
- Improve the attractiveness of the teaching profession
- Improve the opportunities for teachers' recruitment
- Create a continuum for teachers' professional development
- Support teachers' life-long learning, e.g., by supporting schools and teachers' personal development plans
- Take account of competences concerning teaching adult and mature students in TE

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[107] See e.g. Kolb, D.A. (1984) Experiental Lerning. Experience as the source of learning and development. New Jersey: Prentice-Hall, Inc.
Knowles, M. (ed.) (1985; 2005) Andragogy in action: applying modern principles of adult learning. San Francisco, Calif.: Jossey-Bass.

5.3   Suggestions for further research

Enhancing the role of TE experts to form a wide network for further studies

To continue the work of the Commission, *it would be necessary to carry out further studies and investigations to identify all the factors which will influence teachers' work and the improvement of its quality also in the future.* In this study an active network was created, ready to develop TE in the respective countries but also at European level. Creating this network of TE experts from different countries can also be seen as an exceptionally fruitful result of the project, which can also be utilized in future TE research projects. These enthusiastic contact persons are from all 27 Member States from Ministry level, from universities, from TE institutions or other educational organizations (Table 3).

The TE expert network of this project could provide a good basis and also be utilized in the future when planning the Commission's further projects concerning TE and its development in different Member States. It would also be very important to continue to follow the developing process of TE in each country by striving to engage these and other TE experts in discussion and action for improving TE at the European level as well as in their own countries by clarifying and strengthening skills and competences for TE. Using a wide network of TE experts, teachers and other actors will promote and advance a solid research base for the improvement of TE.

Effectiveness and efficiency of initial and in-service TE

The aim of evaluation research projects is to produce data and inform the various parties, policy-makers, education providers, teaching staff, etc., as they seek to develop their own activities to optimally serve the goals set for education. The *effectiveness* of TE can be seen as a question: How should education be arranged to serve the learners, the educational system, the organizers, the financiers and the teaching staff itself as effectively as possible? As regards the *efficiency* of TE, the question is what kind of TE functions in a long-term perspective to best serve future teachers in their everyday work, immediately after newly qualified teachers begin their teaching profession, or in respect of teachers' in-service education.

A survey concerning the effectiveness and efficiency of initial TE could, for instance, produce answers to the question: How do teachers' skills and key competences received in initial TE and in-service TE correspond to their expectations and those of societal stakeholders (e.g., parents, employers, industrial and other working life partners) in respect of, for example, subject competence, working with children, co-operation with colleagues, parents, social personnel, external surroundings, encountering children's social problems, etc? (~ efficiency of TE). Or, how does TE correspond to the requirements of policy makers, etc., to improving the quality of TE, how could they succeed in organizing TE as economically as possible, etc? (~ effectiveness of TE).

When striving to develop TE in the European context, the issue of common understanding concerning teachers' skills and competences in improving the quality of TE are facts which are challenges for the future. One way to improve common understanding in developing TE in the Member States would be *noticing the*

significance of distributing documents concerning TE widely to all actors behind the developing process, to ministries, universities and to TE institutions so as to encourage the actors to find out the significance of the issues included in them. This would also be very important for the equality of teacher students, to recognise, understand and digest the information mentioned in them and not least the skills and competences required for a newly qualified teacher.

These themes, for example, the more common concepts and documentation related to TE, would be significant research questions in the future and should be taken into consideration by the Commission when planning future studies. Encouragement to achieve a common understanding of different kinds of teachers' skills and competences in the future will take place both through discussion aroused by the Commission and through the network of the Member States.

Skill and key competences in different phases of teachers' careers

As the skills and key competences required by teachers are continuously evolving, it would be necessary *to find out which of them should be included in initial TE and which should be enhanced in induction and/or in in-service education.* Research projects concerning these themes would be very useful for policy makers in outlining the overall situation and helping them to develop TE and its continuum as a whole. With this kind of research project, especially concerning skills and competences included in induction and in-service TE, it would be possible to also chart what kind of educational needs teachers will have in the future.

Induction and in-service TE issues and the skills and competences needed in them, have also been very important results deriving from the study. In respect of these areas, it would be important, for example, to carry out the following surveys: *the needs, methods. etc., of the induction phase; teachers' and principals' educational needs for in-service education; teachers' and principals' development plans for in-service education; continuing education for the whole school staff (teachers, principals, tutors, social personnel, health care personnel, local school authorities etc.); and an overall survey concerning the planning and organizing of the continuum in principle and the actions to implement it in practice.*

With these research projects, it could be possible *to identify methods for developing diverse activities in TE.* The results would generate information on how ministries, universities or TE institutions themselves see their contribution in the arena of lifelong learning. In addition, with these studies it would be possible to find out how these institutions seek to achieve the goals originally set for their TE and teaching provision, and see how TE reforms have succeeded and whether they have met the goals set for the reforms. In addition, it would also be very important to study the implementation of research-based learning, the importance and relevance of which has been revealed by the results of this study, when striving to improve the quality of TE.

Recommendations for future development projects
- Using the network of TE experts created in the project as well as teachers and other actors in future development projects to advance a solid research base for the improvement of TE   - Projects concerning the effectiveness of TE   - Projects concerning the efficiency of TE   - Projects concerning relevant skills and key competences of the modern teaching profession and emphasising them in initial TE, induction phase and in-service TE   - Research concerning the quality of TE   - Teachers' needs analyses concerning their skills and competences during the whole continuum

5.4   Improving European principles in TE

'The Common European Principles for Teacher Competences' refer to four essential factors which would be concerned in developing TE and in improving its quality (see Section 3.5.):

- The teaching profession should be a well-qualified profession.

- The teaching profession should be a profession of lifelong learners.

- The teaching profession should be a mobile profession.

- The teaching profession should be a profession based on partnership.

The Commission's Communication *'Improving the quality of TE'* summarises the proposals which would support the work for improving the quality of TE:

- The provision for teachers' education and professional development would be coordinated, coherent, and adequately resourced.

- All teachers should possess the knowledge, attitudes and pedagogic skills that they require to be effective.

- The professionalisation of teaching should be supported.

- A culture of reflective practice and research within the teaching profession should be supported.

- The status and recognition of the profession should be promoted.

According to the results of the 'Teacher Education Curricula in the EU' project, the current situation concerning the above mentioned proposals made in these two main developing TE documents can be assessed as follows:

Both papers emphasise *the professionalism of teachers, since the profession should be attractive to young people.* A well-qualified teaching profession with diversified knowledge, skills and competences has been stressed. Traditionally, pedagogical and subject competences have been emphasised in TE, and braod attention has also been paid to the importance of the relationship between theory and practice. On

the other hand, some skills and competences which have been more current in recent years, have not yet been taken into consideration sufficiently when developing TE. For example, teaching heterogeneous classes as well as more efficient understanding of pupils and students coming from different cultural background should be taken more seriously in TE curricula.

Both papers consider it important that the *teaching profession should be closely tied to the surrounding society and the actors there*. This is why co-operation and collaboration skills as well as improving communication skills will be even more significant in the future.. According to the results of this study, such issues have not been given the consideration they deserve in TE documents.

Both papers emphasise *lifelong learning principles and personal development in the teaching profession.* These issues must receive more attention in the future. To promote the idea of continuum in the teaching profession, there must be an assumption that the induction phase for a newly qualified teacher has to be developed and supported more effectively than so far, and that more attention should be paid to teachers' in-service education than nowadays. Even now teachers' in-service education has not been developed properly in many Member States and even in those countries where it is obligatory for teachers, the amount is insufficient and skills and competences which should be included in in-service TE have not been examined comprehensively.

Summing up the current situation in improving the quality of TE in the European context, it can be stated the discussion that the European Commission has raised among the Member States has been very valuable in promoting the development in TE in the EU. This can be seen in the concrete moves made by Member States in developing their TE policy, and, in more practical terms, in considering what kind of skills and competences future teachers need during their whole career. In this work considerable importance is attached to the recommendations given by the EC.

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THE LIST OF ANNEXES