

FOOTT PRINTTS - AN INTERNATIONAL RESEARCH PROJECT WITH THE AIM OF DEVELOPING PRACTICAL GUIDELINES FOR IN-SERVICE TEACHER TRAINERS

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Abstract

In-service teacher training is the central way to reach teachers after their initial training. The rising importance of in-service teacher training becomes evident in efforts of enhancing quality in education and supporting teachers in a rapidly changing world. This project will perform the first cross-country empirical analysis on quality in in-service teacher training in Europe. Three questionnaires will be developed to address actors who are involved in in-service teacher training on different hierarchical levels, generating a data set of a total of 4,180 surveys gathered in 6 European countries (Austria, Germany, Denmark, Poland, Portugal and Greece). By involving different stakeholders of in-service teacher training in this analysis, quality criteria along with transparency on perceptions, current challenges and needs will be investigated using a sequential mixed method analysis.

Keywords: In-service Teacher Training, Teacher Professionalisation, Quality, CPD, EEA, Educational Management.

1 QUALITY IN IN-SERVICE TEACHER TRAINING

In-service teacher training has acquired worldwide attraction following the concept that teacher trainers support education quality. In most countries, however, teacher educators receive little to no preparation or professional development opportunities to fulfil the tasks they undertake. Consequently, they require getting the related knowledge and skills after accepting the role of teacher trainers [1]. Just as the competence of teachers affects the learning outcomes of students [2], the competence of teacher trainers could affect the quality of teachers.

A crucial component of professionalism among teachers and school leaders is their participation in continuous professional development (CPD) [3], [4].

“The assumption is that achieving a professional-level mastery of complex skills and knowledge is a prolonged and continuous process and, moreover, that professionals must continually update their skills, as the body of technology, skill, and knowledge advances.” [5]

Education systems and training institutions, at both national and local levels, need to accurately identify teachers' needs without losing sight of challenges and current social developments. Understanding teachers' needs while also maintaining a macro-perspective and understanding of the role of education in regional or (trans-)national contexts is necessary to generate sustainable incentives in teacher professionalization and secure access to relevant training for teachers. The quality of teacher training has an impact on the quality of teaching and student learning. It is therefore crucial that more attention is paid to teacher educators. Their individuality, their skills, their tasks and their professional development are crucial. [6], [7]. This project will focus on identifying criteria for quality in continuous professional development (CPD) to ensure that teachers receive the training they need to continue to develop their skills.

In teacher professionalization, building bridges between theory and practice is central for offering quality training. Thus, both areas of research, theory and practice need to be considered equally to improve the quality of in-service teacher training and the training of teacher trainers. An understanding on how to connect theory and practice across subject matter and educational content is necessary for teacher trainers to be able to deliver relevant content and support teachers in tailoring and adapting it to their context-specific needs [8], [9].

In-service teacher training is an area that has received relatively little attention in academic analysis regarding its effectiveness and sustainability in Europe. The insights of studying teacher professionalization in Europe can support the European Commission's goal of improving teaching quality and teachers' job satisfaction as well as improving teacher retention in the European Education

Area (EEA) [10]. While research exists on various micro aspects of classroom-based in-service teacher training, particularly in relation to digitization [11] as well as macro aspects, such as policy analyses [12], [13], a conclusive cross-country European approach that provides a thorough analysis of the conditions for successful in-service teacher training, a macro-level comparison, and a practical approach for teacher trainers are currently lacking.

2 THE PROJECT

The aim of this international research project is to fill the gap in the lack of practical guidelines on quality factors in European in-service teacher education. The project consists of representatives from seven public or private institutions that are involved in in-service teacher training, located in Austria, Germany (Central Europe), Poland (Eastern Europe), Denmark (Northern Europe), Greece (South Europe), France and Portugal (Western Europe). Including diverse partnering institutions that operate on a national or regional level, in public, academic or private sectors shall ensure that over the next three years (2023-2026) this project identifies possible conditions for the success of quality in teacher training that can be applied across Europe, honoring the diversity of education systems and cultures in the EEA. The results will be disseminated in an evidence-based orientation framework and examples of good practice for teacher training on an interactive website using selected countries as examples as well as conferences for professionals to support building strong networks and communities of practice [14]. The following table presents the project partners geographically and illustrates their roles and characteristics.

Table 1. project partners

Country	Institution	Characteristics	Roles
Germany	District Government of Arnsberg, Teacher Training Department	Public Education Sector	Project Leader
Austria	University College of Teacher Education Vienna	Tertiary Education	Empirical Research
Denmark	Børn og Unge Aalborg (City of Aalborg, Children and Youth)	Public Education Sector	Project Partner
Poland	University Rzeszów	Tertiary Education	Research Partner
France	European Institute of Education and Social Policy	Research Institute	Literature Analysis
Portugal	21Knowledge	Private Education Sector	Technical Expert
Greece	Educom+	Private Education Sector	Content Management

Up until now, each country is trying to solve their challenges with teacher CPD mainly without taking neighbouring countries, European countries, into consideration for a summative consensus on a problem that almost every country is facing. This is especially true for the provision of research based systemic approach addressing teacher trainers all over Europe. The project supports a cross-cultural focus of the role of CPD in each participating country, respecting cultural differences and identifying commonalities and thereby providing evidence-based incentives for quality CPD. The following chapters will present the methodology and research design of this cross-country research project and illustrate how these results will be made accessible to professionals across Europe.

3 METHODOLOGY

3.1 Policy Analysis and Mapping

In a first step, a literature review will be conducted from September 2023 to February 2024 to analyze current policies and conditions for success in CPD in the participating six countries Austria, Portugal, Germany, Poland, Greece, France and Denmark. The literature review will be led by the project partner European Institute of Education and Social Policy (EIESP), located in France. The literature review is intended to contribute to an international understanding and agreement on quality standards for teacher training. The review will also take into account relevant EU-level policy priorities including

the 2020 Council conclusions on European teachers and trainers for the future, and the 2022 Proposal for a Council Recommendation on a European approach to micro-credentials for lifelong learning and employability as well as the existing literature and publications on teacher CPD so far. The different sources will provide an overview of the current policy context for in-service teacher training, current trends in provision, governance structures and identified CPD needs. The main aims of the literature review are to report on the state-of-the-art in research on the conditions necessary for effective CPD (both what and how) and to identify gaps in knowledge. Articles and documents identified include empirical research on the impact of CPD on teacher practices and student learning and on training for teacher trainers. The European Institute for Education and Social Policy has opted to utilise Google Scholar for the majority of its literature searches. Most of the academic research found was in English, but the project partners also identified several articles and documents published in the languages of the project partner countries. The searches were based on a shared list of keywords to yield results in English, Danish, French, German, Polish, and Portuguese literature. Examples of keywords used in the search were: Professional development+teacher trainers; professional development+teacher educators; quality+teacher education+in-service, effectiveness+teacher education+in-service.

3.2 Empirical Analysis

Sequential Mixed Methods Analysis

The empirical analysis will generate quantitative and qualitative data on practices and perceptions of the quality of in-service teacher training in the EEA from February 2024 to October 2025. In-service teacher training has been analyzed empirically in individual countries [15], [16] and across Europe [17], [18], however a recent cross-country empirical analysis across Europe is missing thus far. By drawing on evidence from different European regions, a shared conception of perceptions of the quality of in-service teacher training can be generated, while honouring the geographic, cultural, political and institutional differences of the respective education systems. Policy developments to address alternative pathways for teachers in response to teacher shortages in Europe (Eurydice, 2023) are expected to increase the heterogeneity of teachers' experience, training, competence and skill, which creates new challenges for teacher trainers in effectively conducting CPD. The empirical analysis will thus pay special attention to dealing with heterogeneity in CPD.

3.2.1 Phase 1. Quantitative multi-level analysis

"Quality, whilst not easy to define, is mainly a result of the interaction between teachers, students and the institutional learning environment." [19] Thus, including actors from different levels, is essential to generate comprehensive insights on how to effectively address quality, by sharing knowledge and learning from each other's perceptions of quality in in-service teacher training. The multi-level analysis will include the following levels:

The (1) micro-level focuses on teachers' experiences and perceptions of quality,

the (2) meso-level analyses teacher trainers' practices,

the (3) macro-level identifies perceptions of the quality as well as interests of public and private in-service teacher training institutions, political actors and school leaders.

Table 2. Multi-level Analysis of In-Service Teacher Training in Europe

	<i>Micro-Level</i>	<i>Meso-Level</i>	<i>Macro-Level</i>
Actors	Teachers	Teacher Trainers	Public Political Actors School Heads Public Training Institutions Private Managers Private Training Institutions
Analysis	Perceptions of quality Current needs Incentives for participating in in-service teacher training	Practices Dealing with heterogeneity and diversity of teachers	Public interests Private interests Policies

Sample Size	n=600 per country in Austria, Germany, Denmark and Poland n=400 per country in Portugal and Greece n _{total} =3200	n=150 per country in Austria, Germany, Denmark and Poland n=70 per country in Portugal and Greece n _{total} =740	n=50 per country in Austria, Germany, Denmark and Poland n=20 per country in Portugal and Greece n _{total} =240
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The dataset will include 4,180 surveys, of which 3,200 will be completed on the micro-level, 740 on the meso-level and 240 on the macro-level.

A pre-test will be performed in every country and on all levels and analyzed by the University College of Teacher Education Vienna, Austria with the support of the University Rzeszów. For quality assurance, feedback will be received from all participating partners to ensure an inclusive and culturally accurate conception of the questionnaire. An on-site meeting paired with digital solutions for effective collaborative working will be employed to keep motivation high, collaboration sustainable and promote inclusive and active involvement of all project partners. Furthermore, consultations with an external evaluator will help reduce risks created by research design or questions in the questionnaire.

To bridge any interpretation gaps and provide a deeper cultural understanding the quantitative research phase will be followed by a qualitative analysis with experts from the six different countries.

3.2.2 Phase 2. Qualitative expert interviews

3-5 qualitative interviews with teacher trainers per country will provide further insight into the interpretation of the collected data to honour the cultural and social diversity of the respective education systems and practices in the EEA. The results will be interpreted and summarised in a comprehensive guidance framework for the quality of in-service teacher training in the EEA.

On a micro-level, teachers can benefit from this project's results, as they can be used to enhance the quality of in-service teacher training and serve as a platform for visibility of their specific needs. On a meso-level, the generated data can inform trainers' practices and be used for trainers' professionalization to support quality performances in their training programs. On a macro-level, institutional actors can derive incentives for quality assurance to enhance the conditions and infrastructures for in-service teacher training and support the implementation of quality standards in in-service teacher training. The transparency of perceptions and practices of each respective level can create opportunities for interactions between stakeholders, which is an important key factor of quality in education [19] and bridges theory and practice.

3.2.3 Limitations of empirical research

The variety of in-service teacher training programs, such as short-term programs that include ECTS or certificates (e.g. Montessori training, coaching, mentoring, ...) as well as the legal requirements to take part in in-service teacher training (e.g. mandatory vs. optional in-service teacher training, conflicts with teachers' schedules and workhours, etc.) can impact teacher's incentives for attendance. Additionally, quantitative data will be collected during in-service teacher trainings to ensure a high response rate. Recent experiences at work and in in-service teacher training may affect participants' current perspectives and needs.

Furthermore, the difference between private vs. public in-service teacher training programs are expected to influence not only the content offered but also general interests on a macro-level, such as, reaching participants by addressing their current needs in private in-service teacher training programs or implementing policies and in public in-service teacher training programs.

Finally, the political structure of education systems is expected to impact data collection, especially when there are regional differences in a country's in-service teacher training or when collaboration is required across regions in the data collection process. The public *federal* in-service teacher training offered by university colleges in Austria vs. public *regional* in-service teacher training offered by public institutions in Germany or Denmark or *regional private and public* in-service teacher training in Portugal are some examples of differences in political structures of countries included in the data set.

The heterogeneity and diversity of education systems of the countries involved are both a challenge and strength of this project and highlight the necessity of (1) involving different stakeholders to enhance visibility and transparency on perceptions on in-service teacher training and (2) generating evidence-based insights on quality in in-service teacher training. These insights will be summarized in

a guidance framework which can inform policy development and implementation. Finally, this evidence-based framework will inform good practice examples and additional resources shared on an open-access interactive website and two conferences described in section 3.3.

3.3 Practical Guidelines for In-Service Teacher Training

In an interactive website, evidence-based good practice examples, practical tips and useful materials will be published to support teacher trainers in Europe in delivering quality in-service teacher trainings. This project aims to stimulate international cooperation between teacher trainers in public and private educational institutions and facilitate joint international research cooperation in the EEA. By co-creating teacher training material and collecting good practice examples to illustrate the evidence-based framework for quality in teacher training, opportunities for teacher trainers across Europe to get involved, participate in conferences and learn from each other in communities of practice [14] will be provided.

4 EXPECTED RESULTS

4.1 Enhancing the visibility of perceptions and needs of involved stakeholders in in-service teacher training

This study generates recent cross-country empirical data on practices and perceptions of quality of in-service teacher training in six European countries, Austria, Denmark, Germany, Greece, Poland and Portugal. The empirical data helps bridging theory and practice while also assessing the general understanding of quality of in-service teacher training in the EEA. Based on both the theoretical and empirical evidence of research in six European countries a framework for quality of teacher CPD in the EEA will be derived. This framework will build the foundation of an interactive website created.

4.2 Empirical cross-country data on in-service teacher training in Europe

Three questionnaires, one for each level, the micro-, meso- and macro-level, will be developed to identify practices and perceptions of quality of in-service teacher training in six countries, with a total of 800-490 surveys per country, creating a data pool of 4180 participants on in-service teacher training. Additionally, a total of 18 qualitative interviews with teacher trainers, three per country, will provide further insight in the interpretation of all accumulated data, to honor and celebrate the rich cultural and social diversity of the respective education systems and practices in the EEA. This will lead to the generation of up-to-date empirical data on in-service teacher training in the EEA, which is currently underrepresented on a cross-national level.

4.3 Evidence based criteria for quality to support teacher trainers

The results of this study will be interpreted and summarized in a comprehensive framework for quality in in-service teacher training that can be used by teacher trainers across the EEA. This framework will inform the creation of content and collection of good practice examples in a digitized, interactive website as well as international conferences on in-service teacher training in 2025 and 2026.

On a micro-level, teachers can benefit from this framework, as it can be used to enhance quality of teacher CPD and by it serving as a platform for visibility of their specific needs. Furthermore, the generated data can support trainers' practices and be used for trainers' continuous development and professionalization.

On the meso- and macro-level, institutional actors can derive incentives for national politics within the EEA to enhance conditions and infrastructures for in-service teacher training and support the implementation of quality standards in in-service teacher training.

The transparency of perceptions and practices creates opportunities for interactions between the micro-, meso- and macro-level, which is an important key factor of the ESG's definition of quality (ESG 2015).

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