



# FOOTT PRINTTS: Focus on Teacher Training

## Practical Guidelines for In-Service Teacher Trainers

### Literature Review



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# Executive Summary

Research has found that teachers' continuing professional development is one of the most important factors for ongoing improvement in school effectiveness and in student learning outcomes.<sup>1</sup> As highlighted by a 2017 European Commission Communication, teaching involves lifelong career development.<sup>2</sup> Recent education reforms challenge teachers to work with new technologies, to integrate competence-based curricula and new methods for teaching, learning and assessment, to tailor learning to diverse learners' needs, and to collaborate with peers.

This literature review is part of the Erasmus+ project, Focus on Teacher Training – Practical Guidelines for In-Service Teacher Trainers (FOOTT PRINTTS). The FOOTT PRINTTS project focuses on continuing professional development (CPD) for early career and established teachers. A key aim is to identify the elements of effective CPD: in terms of CPD provision (micro-level), the teacher trainers and training institutions and schools (meso-level), and policy levers (macro-level). This will serve as a foundation for the development guidelines to support quality assurance processes in different country contexts. The ultimate aim of the project is to support effective training for teacher trainers, and policies to promote and assure quality CPD provision in

regional, national, public and private training institutions. The project is international, and while teacher CPD provision varies across countries, all countries will have opportunities for mutual learning.

The review covers a broad scope, including research in the academic and grey literature addressing effective CPD; teacher trainer development; and policy-level support for teacher professional development. A mapping of the policy landscape in the project partner countries is also included.

While we have aimed to be as thorough as possible, the review should nevertheless be considered as an indicative summary of evidence, rather than a fully comprehensive research review.

## **The review is organised as follows:**

**Section 1** introduces the FOOTT PRINTTS project and the aims of the literature review. In the course of our research, we found only a few examples of quality assurance for teacher CPD. The conspicuous scarcity of CPD quality assurance frameworks and processes underscores the need for the FOOTT PRINTTS project. Nevertheless, the existing empirical research on the features of effective CPD may serve as guideposts for further inquiry and consultation.

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<sup>1</sup> Chapman C., Harris A. (2004). Improving schools in difficult and challenging contexts: strategies for improvement. *Educational Research*, 46(3), pp.219-228. Retrieved from: <https://doi.org/10.1080/0013188042000277296>

<sup>2</sup> Ciesielski E.J.M., Creaghead N.A. (2020). The Effectiveness of Professional Development on the Phonological Awareness Outcomes of Preschool Children: A Systematic Review. *Literacy Research and Instruction*, 59 (2), pp. 121-147. Retrieved from: DOI: 10.1080/19388071.2019.1710785.

**Section 2** sets out definitions and concepts in the literature on teacher CPD. While there is no one, widely agreed upon definition of teacher continuing professional development, research on teacher CPD tends to emphasise teaching as “lifelong learning” profession<sup>3</sup>, with professional development beginning in initial teacher education and continuing until retirement. Important aims include development of teachers’ knowledge and competences, in addition to their professional judgement and independence, and changes in classroom practices.

**Section 3** sets out the methodology for the review. An important body of research in this area has emerged over the past 15 years, addressing what is known about the impact of different features of CPD, and processes that support changes to teachers’ knowledge, beliefs and practices. We also searched for literature on school level factors that support teacher development, including school leadership, school-level quality assurance, professional learning communities, teacher motivation, and so on. Other literature reviewed explores effective training for teacher trainers, policies to support effective CPD, and CPD quality assurance, which yielded only a few articles. The greater part of the academic research identified for this review is in English, but several articles and documents published in the language of the project partner countries have also been identified by the project partners.

**Section 4** shares the results of the partners’ country mapping (Austria, Denmark, Germany, Greece, France, Poland, and Portugal). It covers a broad set of areas related

to school governance, recent initiatives in school education and related professional development needs. The structure of continuing professional development provision and requirements related to trainers’ qualifications, the link between school and teacher-development, and quality assurance systems for school, teachers and CPD providers are among the areas described. The mapping provides an overview of the broader context of and aims for teacher CPD. Detailed descriptions of different elements shaping country context are also included in Annex 1 of this report.

**Section 5** shares findings from empirical research on the key features of effective CPD. Several meta-analyses have identified features associated with effective CPD. While the findings across these studies are remarkably consistent, more recently, several researchers have noted that programmes that adopt features identified in the literature are consistently successful. Research on the processes and mechanisms of teacher learning and changes in behaviour is also needed.

**Section 6** explores studies on the effectiveness of online/blended CPD. While OECD’s 2018 TALIS found limited teacher participation in online CPD<sup>4</sup>, online teacher learning is a growing area. There are several potential advantages for online delivery of professional development. A greater number of teachers may be reached, including those working in remote areas, more diverse course formats and topics may be covered, etc.<sup>5</sup> The structure of online learning, however, makes a difference to its effective-

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<sup>3</sup> Livingston, K. (2012). Approaches to professional development of teachers in Scotland: pedagogical innovation or financial necessity? *Educational Research*, 54(2), pp. 161- 172.

<sup>4</sup> Minea-Pic, A. (2020). Innovating Teachers Professional learning through digital technologies, *OECD Education Working Papers*, No. 237, OECD Publishing. Retrieved from: <https://doi.org/10.1787/3329fae9-en>.

<sup>5</sup> Vuorikari, R. (2018). Innovating Professional Development in Compulsory Education Examples and cases of emerging practices for teacher professional development, *JRC Technical Reports*. Retrieved from: <http://dx.doi.org/10.2760/734136>.



ness. The degree to which participants are encouraged to reflect and are challenged and, as well opportunities for active collaboration with peers are among the features that need to be carefully designed.

**Section 7** reviews literature on teacher training and quality assurance. A “codified knowledge base” for teacher educators<sup>6</sup> is missing. Given that the role of teacher trainers/educators is substantially different than the teaching profession itself, this is an important gap. A few countries have developed standards for educators providing initial teacher education (Belgium, Israel, Netherlands and the United States). (Detail is also provided in Annex 2 of the report). A framework setting out essential knowledge domains for teacher educators is also shared.<sup>7</sup>

**Section 8** reviews literature on school-level factors, which have a profound impact on teacher professional learning. The quality of relationships within the school, responsive school administrators, teacher collaboration – including through mentoring, peer feedback, and critical examination of teaching practices – are all important. Active learning in job-embedded contexts over an extended duration (with learning over weeks, months, or the academic year) also have an impact on the effectiveness of continuing professional development. A focus on balancing needs for school- and teacher-development can reinforce and support individual and collective professional learning.

**Section 9** highlights literature on policies to support quality continuing professional development. While there is a significant body of research on effective approaches

to teaching, learning and assessment that can support evidence-informed practice the understanding of teacher quality and professionalism is ultimately a normative endeavour. Ultimately, any CPD quality assurance system needs to be based on a clear statement of what counts as ‘good quality’ CPD – developed through a stakeholder consultation process.

The need for teacher standards is presented. Models highlighting main elements of effective CPD, along with mediating features (e.g. policy, school context, the motivation of teacher trainers and of teachers, among other elements) are shared. These models can guide discussions on the broad set of elements that need to be considered in the development of a quality assurance framework.

Specific policy mechanisms and concrete examples of how some countries are currently promoting quality assurance for teaching continuing professional development are shared. These include accreditation of CPD providers, alignment with school-level quality assurance, support for whole-school approaches to improvement, tools to support matching of school and teacher CPD needs, and CPD provision, and monitoring and evaluation of continuing professional development.

The review concludes with summary of the review findings, and a brief discussion on gaps in knowledge and some suggestions for investments in research that brings together insights and experience of researchers, practitioners and policy makers (**Section 10**).

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<sup>6</sup> Goodwin, A. L. and Kosnick, C. (2013). Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers. *Teacher Development*, Vol. 17, No. 3, pp.334–346. Retrieved from DOI: [10.1080/13664530.2013.813766](https://doi.org/10.1080/13664530.2013.813766)

<sup>7</sup> Ibid

# 1.0 Introduction

This literature review is part of the Erasmus+ project, Focus on Teacher Training - Practical Guidelines for In-Service Teacher Trainers (FOOTT PRINTTS). The overall aim of the project is to provide practical tools to support high-quality teacher continuing professional development (CPD) across the European Member States. The project will therefore address the existing gap in European-level standards for quality CPD.

Research has found that teachers' continuing professional development is one of the most important factors for ongoing improvement in school effectiveness and in student learning outcomes.<sup>8</sup> As highlighted by a 2017 European Commission Communication, teaching involves lifelong career development.<sup>9</sup> Recent education reforms challenge teachers to work with new technologies, to integrate competence-based curricula and new methods for teaching, learning and assessment, to tailor learning to diverse learners' needs, and to collaborate with peers.

The FOOTT PRINTTS project focuses on CPD for early career and established teachers. A key aim is to identify the elements of effective CPD – in terms of CPD provision (micro-level), the teacher trainers and training institutions and schools (meso-level), and policy levers (macro-level).

This will serve as a foundation for the development guidelines to support quality assurance processes in different country contexts. The ultimate aim is to support effective training for teacher trainers, and policies to promote and assure quality CPD provision in regional, national, public and private training institutions. The project is international, and while teacher CPD provision varies across countries, all countries will have opportunities for mutual learning.

Currently, there are only a few examples of quality assurance for teacher CPD. The conspicuous scarcity of CPD quality assurance frameworks and processes underscores the need for the FOOTT PRINTTS project. In the following sections we set the context for analysis, exploring definitions and concepts underpinning teacher continuing professional development (section 2.0), research methods of the review (section 3.0), and mapping of the partner country context (4.0). This is followed by a discussion of research findings on the elements of effective teacher CPD (section 5.0), research on online and hybrid CPD (section 6.0), training for teacher educators (7.0), school level factors (8.0) and policies to support high-quality teacher CPD and gaps in evidence (section 9.0).

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<sup>8</sup> Chapman C., Harris A. (2004). Improving schools in difficult and challenging contexts: strategies for improvement. *Educational Research*, 46(3), pp.219-228. <https://doi.org/10.1080/0013188042000277296>

<sup>9</sup> Ciesielski E.J.M., Creaghead N.A. (2020). The Effectiveness of Professional Development on the Phonological Awareness Outcomes of Preschool Children: A Systematic Review. *Literacy Research and Instruction* 59 (2), pp. 121-147. DOI: 10.1080/19388071.2019.1710785.



The research findings set out in this review provide insights that are relevant for all project partners. Indeed, over the past 15 years, research on the effectiveness of CPD on teachers' knowledge and practice, and on student learning outcomes – has focused on core features that are common across different country settings, and different

types of CPD provision. These findings may serve as guideposts for further inquiry and consultation on elements to be included in an international quality assurance model for continuing professional development in the next steps of the FOOTT PRINTTS project.

## 2.0 Definitions and concepts

There is no one agreed-upon definition of continuing professional development in the literature. The European Commission defines professional development as beginning in initial teacher education and continuing until retirement. This approach underlines the view of teaching as a “life-long learning” profession.<sup>10</sup> The OECD defines teacher professional development as “... activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher” (p. 49).<sup>11</sup> Continuing professional development, the OECD emphasises, may include formal learning (e.g. in a structured course, workshop or qualification programme) and informal

learning (e.g. learning among colleagues within schools and across teacher networks, and/or with coaches or mentors).<sup>12</sup> This broad definition accords with situated and cognitive views of views of learning as social and interactive.<sup>13</sup>

Scholars highlight that CPD should support changes in not only in teachers' knowledge and competences but also their attitudes and beliefs <sup>14</sup>. Caena<sup>15</sup> (2011), for example, highlights that some elements of teacher practice are easy to shift, while others are touch on teachers' ‘deeply rooted beliefs and attitudes’ (p. 9), and are therefore more challenging to change.

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<sup>10</sup> Livingston, K. (2012). Approaches to professional development of teachers in Scotland: pedagogical innovation or financial necessity? *Educational Research*, 54(2), pp. 161- 172.

<sup>11</sup> OECD (2009). *Creating Effective Teaching and Learning Environments: First Results from TALIS*. Available at: <https://www.oecd.org/education/school/43023606.pdf>

<sup>12</sup> Ibid.

<sup>13</sup> Lave J. and Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511815355> ‘Professional development and teacher change’.

<sup>14</sup> Guskey, T. R. (2002). *Teachers and Teaching: theory and practice*, 8(3/4), pp. 381-389.

<sup>15</sup> Caena F. (2011). *Literature Review; Teachers' Core Competences: Requirements and Development*. Thematic Working Group. Brussels. EC-DGEC.

Avolos argues that teacher professional learning – both individual and collective – requires cognitive and emotional engagement, a readiness to examine convictions and beliefs, and to try alternative approaches to support improvement or change.<sup>16</sup> Daryai -Hansen and Henriksen (2017)<sup>17</sup> suggest that developing – or challenging – teachers’ theoretical knowledge can support cognitive changes in teacher knowledge, attitudes, and practices. They note that a key aim of teacher training is ‘... precisely to make the experience-based, unconscious aspects of teacher cognition conscious and to create reflection on how new knowledge relates to both the theory-based and experiential knowledge of the individual teacher’ (pp. 53 – 54).

Szempruch (2022) highlights that the Polish understanding of teaching professionalism, which is strongly influenced by the Anglo-Saxon world, sees teacher professionalism as including: 1) knowledge and competences, 2) action (related to needs, emotions, and values) and norms and principles, 3) ethical and moral qualifications, and 4) autonomy, professional judgement, and independence.

The ability to develop autonomously as a professional, as well as examining and analysing the work of other teachers and questioning and testing ideas within classroom research proce-

dures are important aspects of professionalism. Omitting any of these dimensions results in a distorted image of the teacher’s professional role. Teacher professionalism is based on their professionalism, theoretical background, and practitioner knowledge (Szempruch, 2022).<sup>18</sup>

Other scholars place a strong emphasis on the impact of CPD on student learning and wellbeing.<sup>19</sup> Montero-Mesa et al. suggest that CPD needs to place emphasis ‘...on improving teachers’ ability to deal with the uniqueness, complexity, uncertainty and conflicting values that characterise teaching practice, and on the role of teachers as researchers of their own practice and producers of knowledge’ (p. 2)<sup>20</sup>.

These definitions and conceptual approaches are relevant for all types of CPD providers and settings (e.g. targeted courses higher education institutions<sup>21</sup> or through private or non-profit providers, in formal and informal settings, online or face-to-face), and working with teachers at all levels of school education (early childhood education through upper secondary) and subject areas. They also recognise the diversity of teachers’ work and of their backgrounds. Indeed, teachers’ work varies significantly depending on the learner age group, the geographical context of the school, the socio-demographic characteristics of stu-

<sup>16</sup> Avalos, B. (2011). ‘Teacher professional development in teaching and teacher education over ten years’, *Teaching and Teacher Education*, 27(1), pp. 10-20.

<sup>17</sup> Daryai-Hansen, P. and Henriksen, B. (2017). Lærerkognition som centralt udgangspunkt for lærernes praksisnære professionsudvikling – en ny efteruddannelsesmodel’ *Studier i læreruddannelse og cognition. Didaktiske opmærksomhedsfelter*, 2(2).

<sup>18</sup> Szempruch, J. (2022). Problemy kształcenia i doskonalenie nauczycieli w Polsce – w kierunku profesjonalizacji zawodu. *Studia Bass*, (70). pp. 27-47.

<sup>19</sup> Bubb, S & Earley, P. (2010). *Helping Staff Develop in Schools*. Sage

<sup>20</sup> Montero-Mesa, L., Fraga-Varela, F, E Vila-Couñago, E. and Rodríguez-Groba, A. (2023). Digital Technology and Teacher Professional Development: Challenges and Contradictions in Compulsory Education. *Education Sciences*, 13, 1029. <https://doi.org/10.3390/educsci13101029>

<sup>21</sup> Teachers may return to higher education to earn a master or doctoral level certificate while continuing to teach. Formal studies in initial teacher education or to earn a higher-level education teaching degree, such as a master or doctorate degree, are beyond the scope of this study.

dents. Teachers themselves have varied backgrounds (e.g. years of teaching experience, individuals who have entered through alternative pathways as mid-career professionals, etc.)<sup>22</sup> and CPD (external as well as internal to schools) needs to respond to heterogeneity of the teacher workforce.

### Box 1: Teachers entering the profession through “alternative pathways”

Countries increasingly seek to address teacher shortages by recruiting individuals mid-career professionals working in other sectors to teach in schools. Indeed, the most recent TALIS data available (OECD 2019)<sup>23</sup> indicate that at least 13% of new entrants to teaching in Belgium (Flemish community), Estonia, Lithuania had completed fast-track or specialised training programmes.

Teacher First (Germany), Teach for Austria, and Mission Possible (Latvia) and “I choose to teach” (Lithuania) are examples of programmes that provide alternative pathways to teaching. Career changers entering the profession through these types of alternative routes often teach full-time while participating in accelerated initial teacher training.<sup>24</sup> However, as Rose and Sughrue (2020),<sup>25</sup> observe, retention rates for individuals entering the profession through al-

ternative pathways are low. Opportunities for increased, differentiated CPD, as well as in-school mentorship and positive relationships with colleagues and their students are needed to support teachers entering through alternative pathways.

Source: Authors

Booth et al. (2021)<sup>26</sup> differentiate levels of experience as follows: novice (1-3 years’ teaching); advanced beginning (4 – 6 years); and levels from competent, proficient to expert from 7 to 40 years’ teaching. Teachers have different needs for professional development at each of these stages (Day and Gu<sup>27</sup> – cited in Booth et al.) Professionals entering teaching through alternative pathways (e.g. following an accelerated initial teacher education programme while teaching full-time) may have less need to address content, depending on their earlier professional background, but need reinforcement related to classroom practice as well as opportunities to participate in professional learning communities. Ultimately, as Booth et al.<sup>28</sup> emphasis, CPD opportunities need in all cases to be tailored to teachers’ context and needs.

<sup>22</sup> Halász, G., Looney, J., Michel, A. and Sliwka, A. (2018). *Boosting teacher quality – Pathways to effective policies*. European Commission, Directorate-General for Education, Youth, Sport and Culture. Available at: <https://data.europa.eu/doi/10.2766/069297>

<sup>23</sup> OECD (2019). *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing. Available at: <https://dx.doi.org/10.1787/1d0bc92a-en>.

<sup>24</sup> European Commission (2018), Op cit.

<sup>25</sup> Rose, A.L. and Sughrue, J.A. (2020). Promoting Retention of Alternative Certified Teachers Through Professional Development. *NASSP Bulletin*, 104(1), pp. 34–54.

<sup>26</sup> Booth, J.; Coldwell, M.; Müller, L.-M.; Perry, E.; Zuccollo, J. (2021). Mid-Career Teachers: A Mixed Methods Scoping Study of Professional Development, Career Progression and Retention. *Education Sciences*. 11,299. Available at: <https://doi.org/10.3390/educsci11060299>

<sup>27</sup> Day, C.; Gu, Q. (2007). Variations in the conditions for teachers’ professional learning and development: Sustaining commitment and effectiveness over a career. *Oxford Educational Review of Education* 33, pp.423–443.

<sup>28</sup> Booth et al. (2021), Op cit.

Teacher educators – i.e. providers of teacher CPD – are also a diverse group. For the purposes of this study, we adopt the European Commission of “teacher educators” as “...all those who teach or coach (student) teachers with the aim of supporting their professional development (European

Commission, 2013)” (p. 2).<sup>29</sup> This broad definition is useful given the diversity of teacher educator backgrounds as well as the many different settings in which they work (including those in school-based settings).<sup>30</sup>

## 3.0 Methods

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. The review covers a broad scope, including research in the academic and grey literature addressing effective CPD; teacher trainer development; and policy-level support for teacher professional development.

Articles and documents identified include empirical research on the impact of CPD on teacher knowledge, belief and practices and student learning. An important body of research in this area has emerged over the past 15 years, addressing what is known about the impact of different features of CPD, and the CPD processes that support changes to teachers’ knowledge, beliefs and practices. We also searched for literature

on school level factors that support teacher development, including school leadership, school-level quality assurance, professional learning communities, teacher motivation, and so on. Finally, we searched for literature on effective training for teacher trainers, on policies to support effective CPD, and CPD quality assurance, which yielded only a few articles.

Articles were identified on the google scholar search engine, which includes both academic and grey literature. Google scholar also provides access to a large selection of articles. Key word searches aimed to capture the different dimensions of teacher CPD. Key words included ‘teacher quality’ professional development; teacher trainers, in-service training; effectiveness, etc. (a more complete list is included in the footnote).<sup>31</sup>

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<sup>29</sup> European Commission. (2013). *Supporting Teacher Educators for better learning outcomes*. European Commission – Education and Training.

<sup>30</sup> Dengerink, J. et al. (2015). Beiträge Zur Lehrerinnen- und Lehrerbildung. *Lehrerbildnerin/Lehrerbildner* 33 (3), 2015.

<sup>31</sup> Key word searches included: teacher quality; professional development + teacher trainers; professional development + teacher educators; quality + teacher education + in-service; effectiveness + teacher education + in-ser-

The greater part of the academic research identified for this review is in English, but several articles and documents published in the language of the project partner countries have also been identified by the project partners. Project partners based their searches on a shared list of key words to yield results in English-, Danish-, French-, German-, Polish- and Portuguese-language literatures. The project partners, who come from countries with very different CPD sys-

tems, also provided background data to better understand the different priorities for and contexts of CPD (the country mapping).

While we have aimed to be as thorough as possible, the review should nevertheless be considered as an indicative summary of evidence, rather than a fully comprehensive research review.

## 4.0 Partner country contexts: mapping results

This section sets out results of a mapping of partner country contexts. It includes information on:

- country aims for teacher CPD
- recent change initiatives in school education
- the structure of CPD provision (i.e. centralised or decentralised; public, private and/or nonprofit)
- teacher participation in CPD
- school autonomy, and support for school and teacher development
- matching teacher professional learning needs and CPD

- quality assurance systems: schools, teachers and CPD providers
- CPD trainer qualification requirements
- CPD and renewal of teacher certification
- Funding sources for CPD

The mapping has allowed us to have an overview of the broader context of and aims for teacher CPD. More detailed descriptions of different elements shaping country context are included in Annex 1 of this report.

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vice; teacher competence frameworks; teacher standards (articles on national or regional frameworks national or regional); teacher in-service training + digital education; teacher in-service training; school leadership + teacher professional learning; schools as learning organisations; progression of teaching career; alternative teacher training; competency building + teacher hybrid versus face-to-face + teachers + continuing professional development + teachers; blended versus face-to-face + online + continuing professional development + teachers; alternative pathways + mid-career + teaching career + professional development; Digital + teacher professional learning + quality.

## Country aims for teacher CPD

While aims for CPD are set out in policy across the partner countries, no partner country identified a widely shared definition. In France, the website “Becoming a Teacher”, <https://www.devenirenseignant.gouv.fr>) comes close to a notion of CDP within a lifelong learning perspective: “Professional practice must be nurtured by the acquisition of new knowledge or practices, by updating skills, and through regular exchanges with colleagues and stakeholders in the educational community”. In Poland CPD is described as necessary for teachers to improve their competences, deepen their own knowledge and skills, and improve the quality of learning outcomes.

Across partner countries, teacher CPD is seen as necessary not only for teachers’ career development but also to support the implementation of education initiatives. In general, investment in teacher capacity building may be considered as a ‘soft’ policy measure to support teacher quality as well as implementation of system-wide school-level changes. While ministries may also provide CPD to support the implementation of ‘hard’ measures (e.g. more prescriptive measures such as regulations, centrally organised policies, etc.) teacher capacity generally focuses on help-

ing teachers to develop their professional judgement.<sup>32 33</sup>

## Recent change initiatives in school education

All partner countries have introduced significant curricular reforms in recent years, along with CPD to support changes. For example, Austria, France, Poland and Portugal have all introduced curricula to support the eight key competences<sup>34</sup> of the European Framework for Key Competences for lifelong learning (2006; 2018)<sup>35 36</sup>. Competences are defined in the European Framework as a combination of knowledge, skills and attitudes, which may require teachers to integrate new approaches such as project-based learning and portfolio-based assessments.<sup>37</sup> Several countries have also introduced opportunities for trans-disciplinary learning, which may also allow learners to apply knowledge and skills to address complex problems (Austria, Denmark, France, Poland and Portugal). In addition, all project partner countries have introduced initiatives to support basic skills development in reading, mathematics and/or science along with CPD to support their implementation.

Except for Denmark, all partner countries indicate the introduction of initiatives to

<sup>32</sup> Esteves, M. (2001). A investigação como estratégia de formação de professores: perspectivas e realidades. *Máthesis*, (10), p. 217-233.

<sup>33</sup> Szempruch, J. (2022). Problemy kształcenia i doskonalenie nauczycieli w Polsce – w kierunku profesjonalizacji zawodu. *Studia Bass*, (70). pp. 27-47.

<sup>34</sup> The eight key competences set out in the 2018 Council Recommendation on key competences for lifelong learning are: Literacy competence; Multilingual competence; Mathematical competence and competence in science, technology and engineering; Digital competence; Personal, social and learning to learn competence; Citizenship competence; Entrepreneurship competence ; Cultural awareness and expression competence.

<sup>35</sup> European Commission. (2006). *Key Competences for Lifelong Learning – A European Reference Framework*.

<sup>36</sup> European Commission. (2018). *Key Competences for Lifelong Learning – A European Reference Framework*. Retrieved from: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604\(01\)&from=LT#:~:text=The%20Referenc,e%20Frame\\_work%20sets%20out,social%20and%20learning%20to%20learn](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=LT#:~:text=The%20Referenc,e%20Frame_work%20sets%20out,social%20and%20learning%20to%20learn)

<sup>37</sup> Pepper, D. (2013). *KeyCoNet 2013 Literature Review: Assessment for key competences*. European Schoolnet, [http://keyconet.eun.org/c/document\\_library/get\\_file?uuid=b1475317-108c-4cf5-a650-dae772a7d943&groupId=11028](http://keyconet.eun.org/c/document_library/get_file?uuid=b1475317-108c-4cf5-a650-dae772a7d943&groupId=11028).



support digitalisation in education. These may include investments in infrastructure as well as integration of digital content in teaching, learning and assessment, and support for development of learners' digital competences. In the region of North Rhine Westphalia, Germany<sup>38</sup> (hereinafter referred to as NRW/DE), Greece and Poland have introduced support for blended learning (i.e., blending digital and face-to-face learning).

New initiatives to support learner inclusion have also been introduced across the partner countries. The emphasis is on supporting diverse learning needs. Partner countries indicate the introduction of differentiated or specialised tracks for learners (Denmark, NRW/DE, France, Greece, Poland, and Portugal). Austria, NRW/DE, Greece, Poland and Portugal also indicate initiatives focused on specific target groups (e.g. migrant, Roma, and special education needs (SEN) learners). Other measures include integration SEN learners into mainstream schooling (Austria, France, Greece, Poland and Portugal), and establishment of zones of education priority established targeting schools with low performance/high levels of illiteracy/high share of migrant students (Austria, France, Poland and Portugal). NRW/DE has introduced competences cultural awareness and instruction (with the latter highlighting multicultural education and targeting foreign-born students) (NRW/DE).

These different initiatives call for new approaches to teaching, learning and assessment. Competence-based curricula, for example, frequently require teachers to integrate new methods, such as project-based, inquiry-based and interdisciplinary learning. These learner-centred methods are in-

tended to encourage learners – individually and collectively – to use knowledge and skills to address specific problems (e.g. to use new knowledge in a specific context). A greater emphasis on formative assessment (assessment *for* learning) and new forms of summative assessment (assessment *of* learning) are needed to capture complex problem-solving competences. In essence, support for inclusion highlights the need for teachers to develop their capacity to identify and tailor teaching and learning to support all learners to achieve.

### Teacher participation in CPD

The OECD's 2018 Teaching and Learning International Survey (TALIS) found that more than 90% of teachers and principals attended at least one continuous professional development (CPD) activity in the year prior to the survey. At the same time, approximately half of respondents (teachers and school principals) noted that they face scheduling conflicts or lack of incentives to engage in CPD activities.

Among the FOOTT PRINTTS partner countries, except for Denmark, teacher participation in CPD is mandatory. In Denmark, requirements for participation CPD may be regulated by municipalities, but there are no national requirements. In other partner countries, national or regional regulations may prescribe the number of hours required for teacher participation. For example, in Austria, teachers must participate in 15 hours per school year, outside working hours for primary and lower secondary level teachers. At the upper secondary level, participation in CPD is optional. School leaders may also organise mandatory training for their school – and this counts toward teachers' required participation.

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<sup>38</sup> Education in Germany is significantly decentralised. The information provided in this report thus refers only to North Rhine Westphalia, where FOOTT PRINTTS partners are based, and cannot be generalised for all of Germany.

In NRW/DE, teachers are required to participate in CPD each year to ensure their knowledge is up to date, and/or to obtain certificates – for example to teach additional subjects; to become a headmaster or for teachers from other countries who are joining the Germany system. Twice each year headmasters organise mandatory in-house teacher trainings for all teachers at school (SchILf), addressing school related topics. Teachers may also offer micro-trainings on selected topics to their colleagues. NRW/DE does not require any specific number of CPD hours.

In France, the required number of hours and whether CPD counts toward career advancement may vary by type of teacher and career stage. Regulations are typically set by the French Ministry of National Education. Teachers may also request approval from the regional education authority for professional development related to personal projects. While training takes place outside regular teaching obligations, teachers may be compensated for their time.

Teachers in Portugal must participate in CPD that complies with regulations (Decree-Law no. 24/2014) for a minimum of 25 hours over a period of 2-years. Participation in CPD is also linked to career advancement. In Greece, teachers are obliged to participate in trainings for two full days every year. These trainings take place in the morning hours and schools are not in operation. Apart from this, teachers can attend other seminars and trainings organised either at the school premises, or at other places by the educational consultants, university departments, NGOs active in the field, etc. They get points for their participation, which is optional, but nevertheless positively considered in their evaluation.

Several partner countries have introduced measures to encourage greater teacher participation in CPD. In Austria, for example, teachers receive participation certificates (as is also the case in Poland), and the Federal Ministry of Education, Science and Research provides resources to support participation. Nevertheless, only 30% of teachers participate in CPD. This is because there is a severe teacher shortage, which makes it difficult for teachers to take the time needed to participate in CPD.

### **School autonomy, and support for school and teacher development**

We asked partners about levels of school autonomy in their country/region. The OECD's Programme for International Student Assessment (PISA) has found that in countries where schools have greater autonomy over what is taught and how students are assessed, students tend to perform better.<sup>39</sup> An important caveat, however, is that schools must develop effective leadership and school management to take advantage of this autonomy and to support teacher capacity (see also section 8.0 below).

With the exception of Denmark, all partner countries and regions (NRW/DE) indicate that school curricula and assessment are centralised – although schools may also have autonomy in some areas (e.g. innovations in interdisciplinary teaching, as in Portugal). Several partner countries/regions also emphasise the importance of effective school leadership (Austria, Denmark Poland, and Portugal), and school-level teacher learning (e.g. through professional learning communities, teacher collaboration, etc.) (Austria, Greece, Poland and Portugal). Denmark, NRW/DE, Greece, Poland, and Portugal indicate that schools have a 'me-

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<sup>39</sup> OECD (2010). *PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices (Volume IV)*, OECD Publishing.

dium level of autonomy' regarding resource allocation. Austria and France each indicate low levels of autonomy for resource allocation which may limit their ability to adapt to local needs.

As explored in section 8.0 below, research has found that CPD is more effective when school leaders are supportive of teacher participation in CPD and of school-level collaboration and professional learning (elements of a 'whole-school' approach). In addition, follow-up with teachers as they integrate new practices in their classrooms is an important element of effective CPD. Teacher learning between and among schools may also be supported (e.g. through sharing of good practices, as in Poland and Portugal).

All partner countries /regions indicated that schools and teachers are encouraged to align participation in teacher CPD with the school improvement priorities. The FOOTT PRINTTS partner countries indicated different approaches to balancing teachers' individual CPD interests and needs with school-level priorities and needs. In NRW/DE, each school has its own CPD coordinator who is supposed to promote relevant CPDs to teachers. CPD courses necessary for career advancement are mandatory and provided by the district governments. There are also initiatives such the "Digital-offensive", developed with the Ministry of Education. In Poland, teachers are required to participate in CPD that responds to the needs and demands of their school. In Denmark, municipalities (the school owners) and school heads decide on training needs (e.g. on implementation of new national initiatives).

In France, while the Ministry of Education and the Ministry of Higher Education and Research define the Plan National de For-

mation (PNF – National Training Plan), authorities from each regional education authority are in charge of the teacher CPD of permanent teachers, must define the Plan Académique de Formation (PAF – academic plan for continuing training), which is directly derived from the PNF ([order of June 15th, 2012](#)). The rector of the regional education authority, who is also the university chancellor, guarantees the coherence between the initial training plan established by the university, the provisions of which with regard to training placements are subject to an agreement, and the academic training plan, supervising the continuing education of primary and secondary education teachers. Similarly in Greece, CPD courses are decided by the central-level Institute of Educational Policy and by individual school principals. Decisions are based on national education priorities, along with school-level training needs (linked to the school's action plan developed as part of the school self-evaluation).

In Portugal, while policy makers organise CPD initiatives to support the implementation of new policies, schools and school clusters develop training plans in relation to the school improvement priorities. This may include new pedagogical approaches, the use of digital technologies, and so on. Teachers also participate in decisions on CPD they want to follow as they fulfil training requirements.

As explored in sections 5.0 and 8.0 below, on-site school training can be particularly effective for helping teachers to try out and integrate new approaches into their regular practice, and to collaborate with peers ('bespoke' training in schools). All partner countries/regions indicate that this model is supported. France has introduced a "local learning organisations" master plan (2022-2025), which promotes collective reflec-

tion and learning focused on the school's needs. Prioritizing nearby training sessions also helps minimize time and transportation costs. In Austria, schools may organize courses through SCHILF (school internal CPD), and SCHÜLF (inter-school CPD), funded by university colleges of teacher education. There are also tutor/mentor systems, peer observation within or between schools, school leaders' observations. NRW/DE also supports SCHILF. Schools are also encouraged to invite experts to support in-school training (financed, through their school's CPD budget). Each school has its own CPD coordinator.

In Poland, teacher training is supposed to respond to the needs of the school, so the principal, after consultation with the teaching council, commissions the CPD to organise specific training, e.g. in the field of addiction prevention, formative assessment, working with students with behavioural difficulties, burnout prevention, coping with professional stress, etc. In Portugal, schools prepare their CPD plans together with the School Association Training Centre (CFAE) with which they are associated. After the financing and organising the training, it is the responsibility of the CFAE. (Examples from the 91 CFAE may be found at [www.edufor.pt](http://www.edufor.pt)).

As noted, CPD may be provided by several types of organisations. We asked whether non-formal CPD is encouraged and promoted (e.g. through community partners, school-level professional learning communities) and if so, how? While in Austria non-formal CPD does not count toward requirements for teacher professional learning, in NRW/DE, the district government supports non formal CPD opportunities such as communities of practice, networking, Bar-Camp events, and so on. Poland, similarly, allows training with non-formal providers.

In Greece, school leaders may invite professionals to support CPD (e.g. business owners, NGOs, community organisations, and so on), or work with teachers who have specific qualifications on the field of the training they need. Portugal indicates that while work with nonformal providers is not encouraged, schools or groups of teachers may take this approach.

Partner countries also indicate that digital CPD is available in a variety of formats, e.g. MOOCs, e-lectures, webinars, online self-paced courses and blended or hybrid courses. In Greece, digital CPD is developed by the Institute of Educational Policy (<https://elearning.iep.edu.gr/study/>).

### Matching teacher professional learning needs and CPD

Except for Denmark, all partner countries and regions indicate that there are teacher competence frameworks setting out expectations for the knowledge, skills and attitudes teachers are to develop throughout their careers.

### Box 2: Teacher competence frameworks

In 2005, the European Commission introduced the “Common European Principles for Teacher Competences and Qualifications” noting the need for teachers to work effectively with information, technology and knowledge; to work with learners, colleagues in the school and the community; and in broader contexts (local, regional, national and international). Teacher competences were seen in the perspective of the career continuum and of lifelong learning.”

Professional competence frameworks can help to support the consistency of quality teaching in all schools, and support decisions on staffing including for recruitment,

selection and human resource development. They can also support teacher evaluation and decisions related to teachers' learning and career progression.

At a more general level, professional frameworks that emphasise – in addition to deep content knowledge – knowledge of student learning processes, instructional strategies that support pupil-centred learning, and teachers' interpersonal competences provide an effective foundation for teaching competence-based curriculum.

Some countries define competences in terms of professional standards (e.g. Scotland, Ireland). While competences may be considered as general guidelines, for teacher development, professional standards set out more precise, measurable definitions of what teachers should know and be able to do. They are typically linked to accountability and quality assurance processes and guided by professional bodies.”

Area specific competence frameworks (such as, for example, for teachers of art, sciences, mathematics, ICT or vocational education and training) can ensure that competence frameworks are tailored to the discipline and support close involvement of specialist stakeholders. Figure 3 below illustrates some of the different facets that may be included in national professional competence frameworks for mathematics teachers, based on an example from Germany. This framework makes clear that teacher professional competences go well beyond deep content knowledge. In this framework, professional knowledge comprises knowledge of pupils' mathematical thinking, of appropriate mathematical tasks and instructional strategies (which are part of the teacher's pedagogical content knowledge); knowledge of pupil learn-

ing processes, classroom management and instructional strategies (pedagogical knowledge); organisational knowledge and counselling knowledge. These are also guided by the teachers' beliefs, values and goals, their motivations and their ability to regulate their own development.

Source: European Commission, Directorate-General for Education, Youth, Sport and Culture, *Boosting teacher quality – Pathways to effective policies*, Publications Office, 2018, <https://data.europa.eu/doi/10.2766/069297> (Authors: Halasz, Looney, Michel and Sliwka)

These frameworks may be used to identify training needs and plan professional learning (Standards, rather than competence frameworks, offer more precise and measurable aims. Countries with professional standards include Australia, Ireland and Scotland). To ensure teachers and school leaders can find courses that match their needs, several partner countries have introduced online platforms with information on available CPD.

Partner countries also identified a few examples of diagnostic tools that may be used to identify teachers' professional development needs, or to tailor provision appropriately. For example, Austria uses its own digital competence tool to diagnose training needs in this area: Digi. Comp. In NRW/DE, the 'FORMAT' platform is currently under development (being piloted in 60 schools). This free, GDPR compliant tool, will allow schools to diagnose CPD needs, and support the school-level coordinator in their work. Portugal makes use of the EY Joint Research Centre's Selfie for Schools<sup>40</sup>, which has allowed teacher to diagnose strengths and development needs related to teaching with digital tools and content. Training centres have then tailored provision to meet diagnosed needs.

<sup>40</sup> <https://selfieptk.eu/about/selfie-tool-and-selfie-school-report/>



## Quality assurance systems: schools, teachers and CPD providers

Most partner countries and regions indicate that proof of participation in CPD can be used to support career progression (e.g. salary increases, promotion to senior levels/ mentor status, and so on). (Austria, Denmark, France, NRW/DE (e.g. for school leader qualification), Greece (although not for a salary rise), Poland and Portugal).

Both Austria and NRW/DE, publish a CPD online catalogue accessible to all teachers (in Austria, the PH Online, the CPD Index, and online and print bi-annual catalogues). In France, the website Eduscol (<https://eduscol.education.fr/382/je-con-sulte-le-programme-national-de-forma-tion>) provides information about CPD opportunities available for each académie (regional education authority). In NRW/DE, there is also a community coordinator who can arrange CPD for schools.

Greece's Institute of Educational Policy has developed a platform for online trainings (synchronous and asynchronous – available here: <https://iep.edu.gr/el/>). The trainings have been developed by the Ministry of Education and Religious Affairs, in partnership with stakeholders). Similarly, in Poland the Centre for Education Development (Ośrodek Rozwoju Edukacji), supervised by the Minister of National Education, plans and coordinates initial and continuing professional development activities for all teachers.

In Portugal, training is offered locally, and training providers have their own websites. The Autonomous Region of Madeira, for example, has developed the digital hub – INTERAGIR – which all training providers can use to advertise and manage trainings (<https://digital.madeira.gov.pt/interagir>).

Quality assurance processes support school accountability and provide insights to support improvements. All partner countries indicate that they have some form of school-level quality assurance (e.g. school internal and external evaluation/inspection). Teacher appraisal, however, is less common (currently Austria, France and Poland indicate a system for teacher appraisal).

Partners in Austria, France and Germany indicated that external school inspectors may encourage teacher participation in CPD, albeit indirectly if at all. In Austria, inspectors may suggestion CPD seminars or areas, but this is not necessarily a routine part of the feedback process. In France, regional school inspectors in the regions keep track of teacher participation in CPD, but this is not subject to evaluation. In NRW/DE, where schools have inspection visits approximately every 5 years, inspectors look at the whole school using the “Referenzrahmen Schulqualität NRW. The above-mentioned FORMAT platform helps track teacher participation in CPD. School principals have to justify decisions related to school-level CPD (although not in detail”). In Greece, the role of teacher trainer and of school evaluator may be filled by educational consultants.

Approaches to quality assurance of CPD provision in partner countries vary widely. In Denmark, the approach to quality assurance may be decided by the CPD provider themselves. In France, participation evaluation of training sessions is irregular. A 2021 survey found that “the more training ses-



sions are imposed on staff, the less they are evaluated. 45% of primary school teachers indicate that the sessions they attended between 2018 and 2020 never included a means to evaluate their satisfaction. Secondary school teachers make the same statement in only 11% of cases.” (p. 18)<sup>41</sup>. The Direction générale de l’enseignement scolaire (Directorate General of school education) has found that only half of the regional education authorities have implemented a systematic evaluation at the end of each training session. “Post-training” evaluations are rare (only undertaken in a quarter of the regional education authorities). The evaluation of online training sessions is managed by each designer.<sup>42</sup>

Teachers in Greece are typically invited to complete a questionnaire on the training. This is particularly the case in trainings organised by the Ministry of Education or the Institute of Education Policy. In Poland, quality assurance of CPD providers is done via accreditation processes of Board of Education and is available to all public and non-public teacher training institutions.

In Austria, selected courses are evaluated at regular intervals. The federal government has developed a quality framework to guide provision (Box 3).

### Box 3: Austria’s Federal Quality Framework for Continuing Education and Training and School Development counselling

Austria has introduced a Federal Quality Framework for Continuing Education and Training and School Development counselling. The Framework includes 4 dimensions:

- **Process quality**, including cooperation between university colleges of teacher education and the Federal Ministry of Education, Science and Research, education directorates and schools for clarifying requirements, recruiting schools and CPD participants, and approval processes.
- **Product quality**, including criteria for defining content for CPD and school development advice, education, evaluation of the CPD offer, and research and development.
- **Staff quality** in university colleges of teacher, including standards for staff and for their professional development, and for accreditation of external cooperation partners working through the university colleges.
- **The quality of results**, including coverage of defined needs, evidence of transfer into practice, and impact on school and teaching quality.

Each of the quality dimensions is subdivided into quality areas, and indicators are defined. The Federal Ministry of Education, Science and Research, and university colleges of teacher education elaborate the indicators.

Source: Authors

<sup>41</sup> (CNESCO 2018). CCI Formation Continue Dossier de Synthèse’, Retrieved from: [https://www.cnesco.fr/wp-content/uploads/2021/02/Cnesco\\_CCI\\_formation\\_continue\\_Dossier\\_de\\_synthese\\_210218.pdf](https://www.cnesco.fr/wp-content/uploads/2021/02/Cnesco_CCI_formation_continue_Dossier_de_synthese_210218.pdf)

<sup>42</sup> Information cited in the report [Cnesco\\_CCI\\_formation\\_continue\\_Rapport\\_descriptif\\_Piedfer-Queney\\_210319.pdf](#)

In NRW/DE, all CPD events are evaluated with a standardised online questionnaire developed by the district government and results are evaluated by the department of CPD.

#### **Box 4: North Rhine Westphalia School Quality Reference Framework**

The North Rhine Westphalia School Quality Reference Framework, was first launched in April 2014. The Framework outlines elements of a good school and high-quality teaching.

There are six content areas, and these are further divided into 38 dimensions. Explanatory statements differentiate and explain quality criteria and intended learning outcomes. The content areas for teaching and learning, school culture, professionalisation and leadership and management describe expectations related to pedagogical and organisational processes. Content areas focus on the local conditions and core principles that are of key to effective schools.

An updated version of the Framework, which integrates changes such as increased emphasis on digital education, was made available in 2020.

The Referenzrahmen Schulqualität was renewed in 2020 and can be found here: <https://www.schulentwicklung.nrw.de/referenzrahmen/>

Source: Authors

In Portugal, the Scientific Pedagogical Council for Continuing Training (CCPFC) certifies training entities, including the School Association Training Centres (CFAE), higher education institutions, non-profit professional or scientific association training centres, training provided by the Ministry of Education and Science, as well as other public, private or non-profit entities.

CPD evaluation is the sole responsibility of training entities. Some information on CPD provision and participation is produced annually by the ministerial authorities responsible for CPD.

#### **CPD trainer qualification requirements**

In only some of the partner countries are teacher trainers required to have relevant qualifications or to keep their competences up to date. In Austria and Denmark, a significant part of CPD is provided through university-based teacher education department, and they are therefore subject to the university requirements related to trainer qualifications. In NRW/DE CPD trainers who work with the district government are required to participate in 12 trainings in order to serve as a moderator or trainer. To become a CPD trainer for school development there is an additional qualification requirement of another 12 full working days to do so.

In Poland, the Ministry of National Education established qualification requirements for CPD trainers (Regulation on teacher training institutions, 28 May 2019). The regulation specifies: 1) the conditions and procedure for establishment, transformation or closure, as well as the organisation and operation of teacher training institutions, including the scope of their mandatory activities; 2) tasks of methodological advisors, conditions and procedures for entrusting teachers with the tasks of methodological advisors; 3) tasks that can only be performed by accredited teacher training facilities and public teacher training facilities referred to in Art. 8 section 5 point 1 letter b, section 6, section 7 point 2 and section 14 of the Act of December 14, 2016 – Education Law. In Portugal, CPD trainers must be certified at national level by the Continuing Education Scientific-Pedagogical Council and at the level of autonomous regions by the entity that

certifies training. While there are no courses to become a trainer, relevant experience and a master's level degree are required.

In France, There is a competence framework for teacher trainers (Référentiel de compétences professionnelles du formateur de personnels enseignants et éducatifs) ([https://www.education.gouv.fr/sites/default/files/imported\\_files/documents/BO21\\_MENJS\\_1409549.pdf](https://www.education.gouv.fr/sites/default/files/imported_files/documents/BO21_MENJS_1409549.pdf)), although this is not specific to CPD trainers. There is also a certification (Certificat d'aptitude aux fonctions de formateur); this certification contributes to the recognition of the roles of trainers in both primary and secondary education and aims for a gradual understanding of the challenges and competences related to the role of a trainer.

### **CPD and renewal of teacher certification**

While some countries require teachers to renew certification on a regular basis (e.g. Scotland, where teachers are required to report on their participation in accredited CPD), none of the FOOTT PRINTTS partner countries do so. They may, however, be required to participate in CPD to obtain a promotion, or to be promoted as in Poland, Portugal and Greece. In Portugal, teachers are required to complete 25 hours of accredited CPD every two years. In Greece, teachers who work in experimental or model schools need to be positively evaluated by the educational consultant each year.

### **Funding sources for CPD**

Funding sources for CPD vary across the partner countries. In Denmark, school-level CPD is funded by the municipalities. For CPD associated with national change initiatives, however, the municipality and the national ministry may co-finance training. In Austria, training for national-level initiatives such as the introduction of new curricu-

lum, is provided by teacher training colleges and funded by the Ministry of Education. In NRW/DE, all CPD related to introduction of new curricula or state initiatives such as 'digital offensive NRW' are funded by the ministry of education. In addition, the ministry provides schools with a budget for CPD provided through private or non-profit providers. In France, costs related to continuing education are not clearly budgeted. Budget documents do not allow for the distinction between funds allocated for initial teacher training and those allocated for CPD.

Project partners in Poland and Portugal indicate that CPD is financed by various sources. For example, in Poland, funds may come from the national budget, the local government, or other sources such as the European Union. In Portugal, mandatory training is free for teachers and is financed by the ministry (either using internal or EU-provided resources). Some non-mandatory funding, such as trainings organised by schools or associations, are paid by teacher participants.

There are some challenges to introducing a quality assurance framework for CPD. Except for Austria, where official CPD is provided by university-based providers, all partner countries note a range of teacher CPD providers. These include private-sector providers, teacher associations, civil society stakeholders; and public sector (ministry-run). Provision may be online or face-to-face, in seminars, workshops or conferences, in professional learning communities, coaching, mentoring, and so on.

As will be discussed in section 9.0, ensuring quality and transparency in an open marketplace for CPD will require appropriate policy measures and incentives. Any framework will also need to recognise the diversity of aims and methods for CPD, as well as the diversity of CPD needs.

## 5.0 The key elements of effective CPD: findings from empirical research

We identified several studies on the key elements of effective CPD – that is CPD which can be shown to have had a positive impact on both teacher practices and student learning outcomes. In this section, we highlight key articles setting out the foundations for research in this area, and research reviews which provide analyses of the elements of quality CPD, and note areas of debate regarding the research methods and findings. This section focuses on findings from studies on face-to-face provision. This is followed by a discussion on findings from studies on online professional learning (blended as well as fully online) (section 6.0).

### Research on the effectiveness of CPD: in-person learning

Donald Kirkpatrick's 1975 work, *Evaluating Training Programs*, is among the earliest efforts to measure the quality of professional development. This model is not specific to the education field, and so important variables are missing (e.g. school organisational climate).<sup>43</sup> Nevertheless, Kirkpatrick's emphasis on elements such as participants' satisfaction, changes in their knowledge,

beliefs and practices, changes in at organizational level, etc., remain as consistent themes in the literature on teachers' continuing professional development.<sup>44</sup>

In 2000, Thomas Guskey proposed a method specifically for measuring the quality of teacher CPD. Key variables identified by Guskey continue to be considered as vital to effective CPD, including: (1) there is sufficient time and resources; (2) supports collegiality and collaboration; (3) procedures for evaluation; (4) modelling effective instruction; (5) based in schools or on-site; (6) building leadership capacity; (7) linked to teachers' identified needs; (8) uses student learning data; (9) is focused on improvement of individuals and organisations; (10) includes follow-up and support; (11) is ongoing and job-embedded; (12) uses a variety of approaches/forms and (13) supporting ongoing inquiry and reflection. Measures of effectiveness in the Guskey model are based primarily on teacher satisfaction and changes in their attitudes but did not include measures of impact on teacher practice or student learning.<sup>45</sup>

<sup>43</sup> Kirkpatrick, D., Kirkpatrick, J. (2006). Berrett-Koehler Publishers *Evaluating Training Programs: The Four Levels*

<sup>44</sup> Kirkpatrick, D. L. (1977) Evaluating training programs: Evidence vs proof. *Training & Development Journal*, 31(11), pp. 9–12.

<sup>45</sup> Guskey, T.R. (2003). *The Characteristics of Effective Professional Development: A Synthesis of Lists*, Available online: <https://eric.ed.gov/?id=ED478380>.

In 2009, Desimone proposed a conceptual framework that focused on the critical, measurable features of teacher CPD and that can be shown to increase teacher learning, influence practice and ultimately improve student learning. Desimone argued that there was sufficient consensus among researchers to support at least five core (and measurable) features of effective CPD: (1) content (e.g. subject matter content and how students learn that content); (2) active learning (e.g. lesson observation followed by interactive feedback and discussion; reviewing student work); (3) coherence (e.g. consistency with teachers' knowledge and beliefs; consistency with relevant policies) (4) duration (e.g. span of time over which the activity is spread and the number of hours) (5) collective participation (e.g. collaborative learning).<sup>46</sup>

Desimone's work has had an important influence on research in the field. Darling-Hammond and colleagues corroborated Desimone's model and expanded on it. Their 2017 study identified 35 studies which had used a careful experimental or comparison group design, or had analysed student outcomes, controlling for context variables and student characteristics. The study identified seven widely shared features of effective CPD, with each element found in at least 30 of the 35 studies reviewed, and some in all 35. According to their research, effective CPD:

- **Is content focused** – professional development is focused on teaching strategies that may be used with specific curriculum content and in the teacher's own classroom contexts.

- **Incorporates active learning utilising adult learning theory** – teachers have opportunities to design and practice new teaching strategies. Professional development courses may integrate the same strategies teachers are learning to use, including the curriculum, student work assignments and instruction methods.
- **Supports collaboration, typically in job-embedded contexts** – teachers share ideas and collaborate, often in job-embedded contexts, integrating new instructional strategies. Collaborative work may support the development of professional learning communities that work within and across schools,
- **Uses models and modelling of effective practice** – Modelling may involve analysis of case studies developed by other teachers; teacher collaboration in analysis of lesson plans and student work; and reflection on classroom strategies and student outcomes. Teachers are thus able to understand what good practices look like and how they might use them in their own classrooms.
- **Provides coaching and expert support** – Experts may work with teachers one-on-one or in group workshops or as remote mentors to support teachers as they integrate new strategies.
- **Offers opportunities for feedback and reflection** – feedback from experts and peers, and time for reflection allow teachers to consider what might be working well in their practice and should be retained, what might be improved.
- **Is of sustained duration** – effective CPD programmes will engage teachers over weeks, months or academic years.<sup>47</sup>

<sup>46</sup> Desimone, L.M. (2009) Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures. *Educational Researcher*, 38(3), pp. 181–199. DOI: 10.3102/0013189X08331140

<sup>47</sup> Darling-Hammond, L., Hyler, M.E., Gardner, M. and Espinoza, D. (2017) Effective Teacher Professional Development, Learning Policy Institute (June) [https://learningpolicyinstitute.org/sites/default/files/product-files/Effective\\_Teacher\\_Professional\\_Development\\_REPORT.pdf](https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf)



A 2012 study by Stoll et al<sup>48</sup> is based on what they describe as an indicative summary based on evidence on effective approaches. They identify nine features of effective CPD – which are largely in line with the findings outlined above, but also highlight elements such as the importance of external expertise and the importance of varied learning opportunities. According to the Stoll et al., effective CPD:

1. **Starts with the end in mind.** Aims for professional learning needs may be to share recent curricular changes or policy initiatives, or to address needs identified through school evaluation<sup>49</sup>. They also include the intended impact of training on student learning and on teachers' behaviours, attitudes, skills, and practices.
2. **Challenges teacher thinking as part of changing practice.** Learning conversations among colleagues that focus on understanding and using evidence, learning from different perspectives and engaging shared meaning making are an important element of effective CPD.
3. **Is based on the assessment of individual and school needs.** As adult learners, teachers have very different starting points. Effective CPD begins with a diagnosis of individual needs. These also need to link to school improvement needs. In this way a culture of professional learning can be nurtured and supported in schools.
4. **Involves connecting work-based learning and external expertise.** Learning in context is an important component of teacher CPD. It may involve collaboration within and between schools and other external partners. Face-to-face meetings with experts or online learning that allows teachers to connect theory and practice are an important dimension.
5. **Provides learning opportunities that are varied, rich and sustainable.** CPD that incorporates a range of learning activities that may also be adapted to the needs of teachers with varied backgrounds and working in different school contexts has been found to be more effective. Opportunities to learn how to teach specific subject content for different subject areas<sup>50 51</sup> and to embed new approaches are important.
6. **Uses action research and enquiry as key tools.** Enquiry-based approaches allow teachers to put research into practice – with attention to how it may need to be adapted for different contexts and learner needs. Partnerships between practitioners and universities may also support effective learning for all involved.
7. **Is strongly enhanced through collaborative learning and joint practice development.** Effective collaborative learning within and between schools may include focused peer observation and feedback,

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<sup>48</sup> Stoll, L., Harris, A. and Handscomb, G. (2012) 'Great professional development which leads to great pedagogy: nine claims from research' National College for School Leadership, <https://assets.publishing.service.gov.uk/media/5a7dd479ed915d2acb6ee639/Great-professional-development-which-leads-to-great-pedagogy-nine-claims-from-research.pdf>

<sup>49</sup> Butler, D.L., Lauscher, H.N., Jarvis-Selinger, S. and Beckingham, B. Collaboration and self-regulation in teachers' professional development (2004). *Teaching and Teacher Education*, 20(5), pp. 435–55.

<sup>50</sup> Desimone, L. (2009) Op cit.

<sup>51</sup> Cohen, D.K. and Hill, H.C. (2001). *Learning Policy*, Yale University Press



lesson study, learning walks, instructional rounds, and coaching and mentoring. Attention to building trust, recognising different roles and contributions, ensuring relevance to local needs are important elements.

8. **Is enhanced by creating professional learning communities within and between schools.** Effective professional learning communities have a main focus on helping teachers to integrate new practices and on improve student learning outcomes and have a clear, shared understanding of what counts as effective teaching and learning. Distributed learnership within a school can also sustain professional learning and innovation.<sup>52</sup> Distributed leadership within a school can help promote and sustain learning and innovative work.
9. **Requires leadership to create the necessary conditions.** Leaders can reinforce professional learning through teacher appraisal and school evaluation. They may also support cultures of mutual trust and respect, evidence-based enquiry, and a commitment to improvement. Scheduling time for teachers to work together is also important.

These different models see teachers as learning professionals, and CPD is aimed at supporting them to develop their professional judgement and autonomy. Barcz

suggests that teachers need to have a deep understanding of processes, to be able to address challenges efficiently, and to develop their imagination and ingenuity.<sup>53</sup> Esteves (2001)<sup>54</sup> suggests that CPD providers can support this view of by treating teachers as researchers. Teachers who see themselves as researchers, she suggests are more actively engaged in testing and adapting new ideas, and innovating, and CPD therefore needs to develop their research capacities.

Different models of CPD also highlight the importance of professional learning is both an individual and collective endeavour (Halász et al., 2018).<sup>55</sup> Caena (2011)<sup>56</sup> argues that teachers' professional learning communities bring together all the key features of effective CPD, including collaboration with other teachers to address specific tasks and solve problems; feedback based on peer observation; group critical reflection and inquiry; teacher mentors who are able to model new practices and support others to integrate them; and attention to everyday classroom realities. Nevertheless, evidence from the OECD's Teaching and Learning International Survey (TALIS) (OECD 2019) shows that although a significant number of teachers participate in courses and seminars, participation in learning based on more teacher-centred collaborative formats.<sup>57</sup>

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<sup>52</sup> Harris, A. and Jones, M. (2011). *Professional Learning Communities in Action*, Leannta Publishing

<sup>53</sup> Barcz, A. (2021). Doskonalenie zawodowe nauczycieli jako odpowiedź na wyzwania współczesnej edukacji. Z doświadczeń Powiatowego Centrum Doskonalenia Zawodowego Nauczycieli w Puławach. *Kultura-Przemiany-Edukacja*. Kultura-Przemiany-Edukacja.), Vol 9. pp.103-129

<sup>54</sup> Esteves, M. (2001). A investigação como estratégia de formação de professores: perspectivas e realidades in *Máthesis*, , Vol (10), p. 217-233. Available at: <https://revistas.ucp.pt/index.php/mathesis/article/view/3867>

<sup>55</sup> European Commission (2018) Op cit.

<sup>56</sup> Caena F. (2011) Op cit.

<sup>57</sup> OECD (2019). *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, OECD Publishing, Available at: <https://dx.doi.org/10.1787/1d0bc92a-en>.

## Surveys: Teacher feedback on “what works” in CPD

We identified studies based on surveys of teachers and other stakeholders regarding their experiences with CPD activities, alongside insights on effective teacher development gathered from the OECD's 2015 PISA survey. The findings of these studies are consistent with the Darling-Hammond et al. and Stoll et al. studies on the effectiveness of CPD, as measured by changes in teacher knowledge, practices, and (where possible) student outcomes.

The OECD's 2015 PISA survey integrated a survey of teachers with its tri-annual assessment of 15-year-old learner competences. The teacher survey and learner assessment data were analysed jointly, and correlations between policies and student outcomes were identified. The study found that in high-performing countries, professional development policies included mandatory and extended periods of clinical practice in initial teacher education or in the induction period; a variety of opportunities for bespoke professional development, such as workshops organised by schools; and teacher appraisal linked to a strong focus on continuous improvement. The OECD study findings depend on availability of data in PISA and related databases, so they do not cover the gamut of variables identified in other studies on the effectiveness of teacher CPD. Given the scale of PISA, which gathered data from 72 countries and economies in 2015, the findings are nevertheless important.<sup>58</sup>

Other large-scale surveys provide additional feedback from teachers on their professional learning preferences. A 2014 study conducted by the Boston Consulting Group on behalf of the Gates Foundation reached out to more than 1,300 education stakeholders in the United States, including teachers, school leaders, professional development leaders in school districts, CPD providers and other experts through interviews and surveys. A second phase included a survey of 1,600 additional teachers.<sup>59</sup> Respondents to the survey agreed that to be effective, CPD needs to be relevant, to include demonstrations, modelling and opportunities for practice, and to be sustained over time. Teachers indicated they want more lesson observation (84% of respondents), coaching (82%) and professional learning communities (74%) than they were being offered. Teachers also noted a preference for ongoing coaching, provided by experienced content experts who were also trained in providing feedback.

In-school collaboration, according to the survey respondents, is most effective when it is structured, has clear objectives, and there is mutual accountability among participants. This includes formal collaboration time, shared responsibility for lesson planning, cultures that support collaboration (e.g. grade-level and subject area teams, and relationships based on trust and support) and focus on key challenges (e.g. differentiated learning). Respondents found in-school collaboration to be most helpful for lesson planning aligned with curriculum and learning expectations, and to support development of teaching competences in content areas.

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<sup>58</sup> OECD (2018). *Effective Teacher Policies: Insights from PISA*, OECD Publishing, <https://doi.org/10.1787/9789264301603-en>.

<sup>59</sup> Boston Consulting Group (2014). *Teachers know best: Teachers' views on professional development*. Available at: <https://usprogram.gatesfoundation.org/news-and-insights/usp-resource-center/resources/teachers-know-best-teachers-views-on-professional-development>

Importantly, teachers who choose their professional development learning opportunities most or all of the time report much higher levels of satisfaction than teachers who have little to no choice (see also Boeskens, Nusche and Yurita, 2020<sup>60</sup>, who highlight the importance of aligning externally identified training needs based on system and school-level goals, along with teachers' personal learning interests. CPD teachers' ability to steer their professional learning,)

An earlier meta-study by Ingvarson, Meiers and Beavis (2005) analyses four studies conducted by the Australian Government Quality Teacher Programme. Collectively, the studies and brought together survey responses from 3,250 teachers who had participated in 80 different CPD activities between 2000 and 2003. Activities included workplace learning (e.g. through action research, coaching, mentoring); institutional review of research findings and best practices; online learning; formal award programmes, and conferences and seminars.

The Ingvarson et al. study uses a theoretical model based on the characteristics of effective professional development as identified in the literature. The researchers analyse the logic connecting professional learning strategies and intended changes in teacher knowledge, teaching practices and student outcomes. In addition, contextual factors of CPD (e.g., school-level support), programme length (contact hours and time span, ranging from less than one week to more than six months), the emphasis on features such as learning content, active learning methods, attention to student work, feedback, follow-up with teachers and the extent to which CPD programmes

led to the development of professional learning communities are examined. The teacher surveys were implemented at least three months after teachers participated in a CPD activity, allowing respondents to develop perspective on any changes to their knowledge, professional practices, student learning and efficacy.

Ingvarson et al. found that the greatest reported impact on teacher knowledge, and influence on teacher practice and teacher efficacy included:

- 'opportunity to learn', including the content of CPD programmes (and in particular programmes which focused on research-based knowledge of how students learn),
- methods to teach content and to address potential challenges students may have in learning the subject,
- the extent to which programmes provided opportunities for active learning and reflection, and
- the extent to which the programmes strengthened school-level professional communities This area had the greatest reported impact on teacher knowledge – and influence on teacher practices and teacher efficacy.<sup>61</sup>

Ingvarson et al. also note that programmes that include follow-up support and coaching in classrooms provide opportunities for teachers to get feedback on the new skills they are developing. School-level support also has an important influence, including the extent to which teachers can engage in active learning, follow-up and feedback, and to be active in a professional communi-

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<sup>60</sup> Boeskens, L., D. Nusche and M. Yurita (2020). Policies to support teachers' continuing professional learning: A conceptual framework and mapping of OECD data. *OECD Education Working Papers*, No. 235, OECD Publishing. Available at: <https://doi.org/10.1787/247b7c4d-en>.

<sup>61</sup> Ingvarson, L., Meiers, M. & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy. *Education Policy Analysis Archives*, 13(10). Retrieved from <http://epaa.asu.edu/epaa/v13n10/>.

ty. Programmes with longer time spans allowed more time for follow-up support. Effective CPD programmes support teachers to reflect standards for professional practice, engaged them in identifying what they needed to learn, and in planning of their learning experiences.

Project partners also shared smaller scale studies that have also provided insight on teachers' preferences regarding CPD. Barcz (2021), in a survey of 482 teachers in the Puławy district of Poland found that teachers preferred CPD based on consultation and workshops developed by the local training centre, which was best placed to respond to the local context and teacher needs. Importantly, teachers also expressed the importance a focus on teachers' own learning processes, and supporting respect, dialogue, and an attitude of openness to change and the ability to solve problems in their community. A survey of 207 teachers in Trikala Greece found that the main barriers to participation were related to a mismatch of the offered programmes and their own professional development needs (Kalliaras, 2020).<sup>62</sup>

### The importance of the training process and broader contexts

While the findings of empirical studies on the effectiveness of CPD are remarkably

consistent, more recently, several researchers have noted that programmes that adopt these features are not consistently successful (Kennedy, 2016<sup>63</sup>). That research might more productively focus on the processes and mechanisms of teacher learning (Kennedy, 2016<sup>64</sup>; Asterfall and Lefstein, 2023; Richter (undated)<sup>65</sup> and Lipowsky, 2018<sup>66</sup>).

Methodologies that focus on measuring the impact of different CPD features, Asterhan and Lefstein (2023)<sup>67</sup> argue may, at least for some findings, skew results. For example, research showing the relative success of content-focused training (as compared to training focused on general skills) can be explained by the statistical correlation of the content focus of standardised test scores. They also argue that focusing on improvements in student learning as the 'gold standard' for measurements of PD effectiveness sets an unrealistically high bar. While CPD focuses most immediately on shifting teachers' knowledge, skill, beliefs and practices, changes in their students' motivation, learning and test performance are far removed from the initial input.

Kennedy (2019)<sup>68</sup>, in a meta-analysis of studies using randomised control groups, found that effective interventions were adapted to local conditions, and focused

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<sup>62</sup> Καλλιάρης, Κ. (2020). Συμμετοχή Εκπαιδευτικών Δευτεροβάθμιας Εκπαίδευσης σε Επιμορφωτικά Προγράμματα: Κίνητρα και Εμπόδια, *International Journal of Educational Innovation*, 2(1)

<sup>63</sup> Kennedy, M. (2016). How does professional development improve teaching?, *Review of Educational Research*, 86(4), pp. 945-980, <http://dx.doi.org/10.3102/0034654315626800>.

<sup>64</sup> Ibid.

<sup>65</sup> 'On the effectiveness of teacher training programmes and the conditions for successful transfer' Richter, D. Presentation. <https://www.uni-potsdam.de/de/erziehungswissenschaftliche-bildungsforschung/prof-dr-dirk-richter/publikationen>

<sup>66</sup> Lipowsky, F. (2018). *Designing effective training programmes for teachers*,. Presentation, Catholic . <https://www.frank-lipowsky.de>

<sup>67</sup> Asterhan, C.S.C. and Lefstein, A. (2023). The search for evidence-based features of effective teacher professional development: a critical analysis of the literature. *Professional Development in Education*, 50(1), pp. 11-23, DOI: 10.1080/19415257.2023.2283437

<sup>68</sup> Kennedy, M. (2016). How does professional development improve teaching? *Review of Educational Research*, Vol. 86/4, pp. 945-980. <http://dx.doi.org/10.3102/0034654315626800>.

on supporting teachers to think about strategically and autonomously about student learning and behaviour – and not just teaching practices or content knowledge. For Daryai-Hansen and Henriksen. (2017)<sup>69</sup>, the focus on teacher cognition is important because teachers' capacity for reflection on their pedagogy bridges theoretical and practical aspects of professional learning. It emphasises the importance of professional exchange and development through collaboration.

Richter (undated)<sup>70</sup>, suggests that research on effective CPD should focus on the processes that support teacher learning and changes in behaviour, rather than on the outcomes of CPD. Lipowsky (2018) and Asterhan and Lefstein (2023)<sup>71</sup> highlight the importance of trainers' characteristics (absent from studies cited earlier in this section), the quality and quantity of learning as well as the use teachers' make of training, which is in turn influenced by teachers' prior knowledge and competences, and their school context. Their studies underscore the complexity of CPD processes – and of learning itself (see also Webb, 2009<sup>72</sup>).

Timperley et al. (2007)<sup>73</sup> argues that, based on the available evidence, no single form of learning activity is universally effective. Rather, the content of the activity, and its alignment with intended learning outcomes is more important. Timperley et al. also suggest that having a variety of activities

can reinforce learning and allow teachers to reflect on and try out new methods.

Lipowsky and Rzejak (2017)<sup>74</sup> share an “offer- utilization” model for teacher training with the aim of clarifying key elements in teacher CPD processes. These include the characteristics of in-service teacher trainers (e.g. their didactical and pedagogical expertise and motivation). In turn, the motivation, cognitive, personality-related and professional biographies of participants also affect outcomes. Other research argues that the contextual elements which mediate changes in teachers' knowledge and practices make any measurement of CPD effectiveness challenging. These factors include, Caena (2011)<sup>75</sup> suggests, student characteristics; individual teacher characteristics; the context of the classroom, local professional community, local school district; policy conditions at multiple levels.

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<sup>69</sup> Daryai-Hansen and Henriksen (2017) Op cit.

<sup>70</sup> Richter (undated) Op cit.

<sup>71</sup> Asterhan and Lefstein (2023) Op cit.

<sup>72</sup> Webb, N.M. (2009). The teacher's role in promoting collaborative dialogue in the classroom, *The British Journal of Educational Psychology*, 79 (1), pp. 1–28.

<sup>73</sup> Timperley, H. et al. (2007). *Teacher Professional Learning and Development: Best Evidence Synthesis Iteration*, , New Zealand Ministry of Education, Wellington, <http://educationcounts.edcentre.govt.nz/goto/BES>

<sup>74</sup> Lipowsky, F. and Rzejak, D. (2017). Fortbildungen für Lehrkräfte wirksam gestalten – Erfolgsversprechende Wege und Konzepte aus Sicht der empirischen Bildungsforschung'. *Bildung und Erziehung* 70 (4)

<sup>75</sup> Caena (2011) Op cit.



## 6.0 Studies on the effectiveness of online/blended CPD

The OECD's 2018 TALIS found limited teacher participation in online CPD (Minea-Pic, 2020)<sup>76</sup>. It is possible, however, that in 2020 the move to emergency remote learning during the height of the COVID-19 pandemic may have influenced more teachers to participate in online courses on regular basis. The 2024 TALIS results (forthcoming) will provide a better view of changes in teachers' online professional learning preferences.

There are several potential advantages for online delivery of professional development. A greater number of teachers may be reached, including those working in remote areas, more diverse course formats and topics may be covered, etc. (Vuorikari, 2018<sup>77</sup>). In France, a 2019 survey of 41,000 teachers found that more than 80% of respondents do not have any say in defining their participation in CPD, although they believe this is important. Moreover, the survey found that most training courses offered

tend to focus on information regarding new programmes, new tests or other developments. As a result of this, teachers are more likely to participate in online training courses, typically provided through professional networks and associations, as well as informal exchanges with peers.<sup>78</sup>

An important question is whether online CPD is as effective in hybrid formats that combine online and face-to-face learning as purely face-to-face learning. Two small-scale studies identified in our research compare hybrid models online only CPD. In both studies, researchers found no difference between the two modes of delivery. Li et al. (2023)<sup>79</sup>, in their comparison of face-to-face and online CPD for science teachers, found that they are equally effective, although variables such as the establishment of online communities for communication influence effectiveness. Mary and Cha<sup>80</sup> found that the effectiveness of online CPD may vary according to participants'

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<sup>76</sup> Minea-Pic, A. (2020). Innovating teachers' professional learning through digital technologies. *OECD Education Working Papers*, No. 237, OECD Publishing. <https://doi.org/10.1787/3329fae9-en>.

<sup>77</sup> Vuorikari, R. (2018). Innovating Professional Development in Compulsory Education Examples and cases of emerging practices for teacher professional development. *JRC Technical Reports*, <http://dx.doi.org/10.2760/734136>.

<sup>78</sup> Louveaux, F (2019). La refonte de la formation continue des enseignants en France, un outil de qualité ? *Revue internationale d'éducation de Sèvres* URL : <http://journals.openedition.org/ries/7672> ; DOI : <https://doi.org/10.4000/ries.7672>

<sup>79</sup> Li, Z., Hassan, N.C. and Jalil, H.A. (2023). Science Teachers: A Systematic Review' *Education Sciences*. 13,1251. <https://doi.org/10.3390/educsci13121251>.

<sup>80</sup> Mary, L. and Cha, J. (2021). Filipino Science Teachers' Evaluation on Webinars' Alignments to Universal Design for Learning and Their Relation to Self-Efficacy amidst the Challenges of the COVID-19 Pandemic. *Asia-Pacific Science Education*, 7, pp. 421–451. Cited in Li et al. (2023).



digital competences and self-efficacy, as well as their working environment (e.g. the quality of internet connection, etc.). For teachers who have less experience with digital formats and MOOCs, guidance and user-friendly designs are important.<sup>81</sup> Other factors include opportunity to adapt online learning opportunities, and support in navigating online resources, allowing teachers to curate tools, research, and courses.<sup>82</sup>

Minea-Pic, on the other hand, in her review of the literature on online CPD for the OECD, finds that learning environments that blend face-to-face CPD opportunities appear to be more effective and to be preferred by teachers over formats that are purely virtual. Blended formats support the development of trust, which is linked to greater participation in online communities. She notes that the effectiveness of communities depends on the presence of skilled community moderators.<sup>83</sup> School-level support, content and opportunities for professional collaboration are also important,

The structure of online CPD platforms make a difference to their effectiveness (Meirinho and Osório, 2008).<sup>84</sup> Meyer,

Kleinicht and Richter (2020)<sup>85</sup> surveyed teachers on their perceptions of the quality of their online PD activities and satisfaction with changes in practices (N=387). The researchers found that important features in online learning were high levels of cognitive activation – that is, activities that promote reflection, present new information and approaches that cause teachers to question their routines, provide new insights, and initiate discussions among participants are approaches), high clarity and structure of activities, and moderate levels of participant collaboration. Cognitive activation and collaboration are correlated with teachers' reported changes in their practices. Nevertheless, Meyer et al. found that teacher opportunities for online collaboration were limited (see also Powell and Podur<sup>86</sup>), 2019.

Research indicates that only a minority of teachers participate actively in online communities even though online networks offer plentiful opportunities for teacher collaboration within and beyond their schools,<sup>87</sup> Lantz-Andersson, Lundin and Selwyn find that interactions tend to be superficial and more focused on sharing information than on reflection.<sup>88</sup> Research related to engage-

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<sup>81</sup> 'Creating a Community Rather than a Course—Possibilities and Dilemmas in a MOOC'. *Education Sciences*, 6.

<sup>82</sup> Trust, T. and B. Horrocks (2017). "I never feel alone in my classroom": teacher professional growth within a blended community of practice, *Professional Development in Education*, 43 (4), pp. 645- 665, <http://dx.doi.org/10.1080/19415257.2016.1233507>.

<sup>83</sup> Minea-Pic, A. (2020), Op cit.

<sup>84</sup> Meirinho, M, Osório, A. (2008). *Factores condicionantes da aprendizagem colaborativa em ambientes virtuais: estudo de caso no âmbito da formação contínua de professores*. Escola Superior de Educação de Bragança Instituto Politécnico de Bragança. Instituto de Estudos da Criança, Universidade do Minho. Available at: <https://biblioteca-digital.ipb.pt/handle/10198/617>.

<sup>85</sup> Meyer, A. Kleinknecht, M. and Richter, D. (2023). 'What makes online professional development effective? The effect of quality characteristics on teachers' satisfaction and changes in their professional practices', *Computers & Education*. <https://doi.org/10.1016/j.compedu.2023.104805>

<sup>86</sup> Powell, C.G. and Bodur, Y. (2019). Teachers' perceptions of an online professional development experience: Implications for a design and implementation framework. *Teaching and Teacher Education*, 77, pp. 19-30, doi:10.1016/j.tate.2018.09.004 – cited in Meyer et al. (2023).

<sup>87</sup> Lantz-Andersson, A., Lundin, M. and Selwyn, N. (2018). Twenty years of online teacher communities: A systematic review of formally-organized and informally-developed professional learning groups. *Teaching and Teacher Education*, 75, pp. 302-315.

<sup>88</sup> Minea-Pic (2020), Op cit.

ment and course completion, for example, has found that behavioural and motivational interventions are important.<sup>89</sup> An additional point is that teacher participation is also likely to be affected by the certification requirements in their country. Open badges and certificates for participation in MOOCs may not be accepted in cases where teachers need formal recognition.<sup>90</sup>

The abundance of online resources and time needed to identify those that are most useful can create important barriers.<sup>91</sup> therefore may need support to navigate online resources so that they can curate resources (courses, tools, research) or to adapt online learning opportunities. The abundance of online resources and time needed to identify those that are most useful can create important barriers.<sup>92</sup> (See also Orr, Rimini and van Damme, 2015; Seo and Han, 2013.<sup>93</sup>)

Monnier et al. (2023) examine an online 'train the trainer' programme implemented with 14 teacher trainers in Switzerland. This model is proposed as a way to introduce system-wide changes – in this case for teachers to integrate digital tools in teaching, learning and assessment. Based on focus group data and a thematic analysis of collaborative portfolios, the authors recommend that:

- **Personal characteristics of online teacher trainers**

- Teacher trainers should have current teaching experience and be working in the same context as those being trained.
- Experience in adult and digital training are vital

- **Online interactions**

- The teacher trainers should be monitored by expert trainers, and provided with quantitative and qualitative feedback
- Expert trainers should facilitate meetings between teacher trainers and school stakeholders as a way to develop communications, and an effective community of practice
- Expert trainers should be engaged in teambuilding and support for teacher trainer/school partnerships

- **Content**

- Expert trainers should allow teacher trainers to prepare content and add to it (although fidelity of implementation needs to be monitored)
- Expert trainers and teacher trainers should collaborate in adapting and discussing content.

- **Logistics**

- Expert trainers should provide organisational support (training schedule, technical equipment and infrastructure).
- Expert trainers should work in tandem to ensure support.

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<sup>89</sup> Ibid.

<sup>90</sup> Ibid.

<sup>91</sup> Trust and Horrocks (2017), Op cit.

<sup>92</sup> Ibid.

<sup>93</sup> Seo, K. and Y. Han (2013). Online Teacher Collaboration: A Case Study of Voluntary Collaboration in a Teacher-Created Online Community. *KEDI Journal of Education Policy*, 10 (2), pp. 212-242. <http://eng.kedi.re.kr/khome/eng/kjep/pubList.do>.

## 7.0 Studies on teacher trainers and quality assurance

Literature we identified on teacher training and quality assurance highlights the lack of a “codified knowledge base” for teacher educators<sup>94</sup>, and lack of attention to research on the impact of their professional learning opportunities.<sup>95</sup> This is an important gap. Dengerink, Lunenberg and Korthagen highlight that the role of teacher trainers/educators is substantially different than the teaching profession itself, and researchers cannot rely on research for teacher CPD to stand in for training of teacher trainers.

In their 2014 review of the literature, Dengerink, Lunenberg and Korthagen identify six different roles for teacher educators in the literature (with a primary focus on those working in initial teacher education). They are: (1) teacher of teachers; (2) researcher; (3) coach (4) curriculum developer; (5) gatekeeper (responsible for admission to the teaching profession); (6) broker (responsible for the connection between school and teacher education institute). They also found that research has a variety

of foci and an almost complete absence of quantitative studies.

Czerniawski, Guberman and MacPhail (2023)<sup>96</sup> address the scarcity of empirical research on teacher trainers through their survey of 1,680 school-based teacher educators (SBTEs) in 12 countries (Australia; Austria; Belgium; England; France; Ireland; Israel; Norway; Portugal; Romania; Scotland; and The Netherlands). They found that most SBTEs receive some form of training (preparation through a teacher education programme and on-the-job guidance) but they also indicate a need for better preparation in relation to pedagogy- and research-dimensions of the work.

Czerniawski, Guberman and MacPhail contrast their 2023 findings with a 2016 survey on higher education-based teacher educators’ CPD opportunities (Czerniawski, Guberman and MacPhail, 2016<sup>97</sup>), and note that SBTEs are actually more likely to benefit from some sort of professional develop-

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<sup>94</sup> Goodwin, A. L. and Kosnick, C. (2013). Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers. *Teacher Development*, Vol. 17, No. 3, 334–346, <http://dx.doi.org/10.1080/13664530.2013.813766> DOI: [10.1080/13664530.2013.813766](https://doi.org/10.1080/13664530.2013.813766)

<sup>95</sup> Dengerink et al. (2015), Op cit.

<sup>96</sup> ) Czerniawski, G. Guberman, A. MacPhail, A. and Vanassche, E. (2023). Identifying school-based teacher educators’ professional learning needs: an international survey, *European Journal of Teacher Education* <https://doi.org/10.1080/02619768.2023.2251658>

<sup>97</sup> Czerniawski, G., Guberman, A. and MacPhail, A. (2016). The professional developmental needs of higher education-based teacher educators: An international comparative needs analysis, *European Journal of Teacher Education*, 40(1), pp. 1-14. DOI: [10.1080/02619768.2016.1246528](https://doi.org/10.1080/02619768.2016.1246528)

ment activity for their work. (Symeonidis 2020). Belgium and Ireland were also reported to be developing standardized training programmes for SBTEs. At the same time, the SBTE survey respondents indicated a preference for informal learning conversations.

Acknowledging the potential dangers of generalisation, the factor analyses deployed in this study and the three areas of interest for professional learning it revealed (i.e. *academic interests*, *pedagogical interests* and *learning with and from colleagues*) highlighted the importance placed on informal learning opportunities (see Table 4). These preferred modes of learning were, in many cases, similar to those of higher education-based teacher educators described by MacPhail et al. (2018), e.g. informal learning (e.g. conversations, personal reading and peer observations).

It is also worth noting that a few countries have developed standards for educators providing initial teacher education (Belgium, Israel, Netherlands and the United States). A table outlining key elements for these frameworks is included in Annex 2. Goodwin and Kosnik (2013), note that the standards for teacher educators working in initial teacher education do not represent consensus in the field, are overly broad, and are not used consistently. In addition, teacher educators typically do not have any kind of induction period and are left to themselves to create their professional identity in this new role. To address these gaps, Goodwin and Kosnik suggest a framework with essential knowledge domains for teacher educators (relevant also for teacher educators working in CPD), including:

1. Personal histories, knowledge and teaching philosophy. This is important for teachers to identify their beliefs, attitudes, potential (mis)conceptions and biases.
2. Contextual knowledge, understanding of adult learners, schools, and the larger social context. New teacher trainers' involvement in self-study in professional communities can support their development.
3. Pedagogical knowledge/content, theories, teaching methods, and curriculum development; This includes theories of learning and learner development. Teacher trainers also need to be able to model pedagogies they are asking CPD participants to use.
4. Understanding and knowledge of diversity, cultural relevance, and social justice issues. This includes confronting prejudices and misconceptions.
5. Knowledge of cooperative and democratic group process, and conflict resolution.

## 8.0 School-level factors and teacher CPD

School-level factors have a profound impact on teacher professional learning. Johnson, Kraft and Papay (2012) found that teachers working in supportive contexts develop professional competences more quickly and remain in teaching longer. The quality of relationships, opportunities for collaboration, and responsive school administrators, and academic and behavioural expectations for learners matter more than modern school facilities.<sup>98</sup> Teacher collaboration to support opportunities for professional learning, including through mentoring, peer feedback, and critical examination of teaching practices<sup>99</sup>. Active learning in job-embedded contexts; extended duration of CPD (with learning over weeks, months, or the academic year) also have an impact.<sup>100</sup>

Sprogøe, J. and Sunesen (2021) highlight the need to balance the development needs of individual teachers and of the school as

a whole and argue that that teacher training needs to satisfy the needs of learners, teachers, the school, and the educational community as a whole.<sup>101</sup> Lipowsky and Rzejak (2017) argue that teacher CPD contributes not only to the individual teacher's learning, but also to school improvement.

School leaders (the principal and their team, department heads and other staff) have an important role to play in bridging individual teacher and school development needs, which Illeris describes as having different 'logics' (i.e. participant logic based on personal interests and goals and workplace logic based on the goals of the school as a whole (Illeris, 2004).<sup>102</sup> At the school level, leaders create the conditions for effective professional learning, by coordinating processes for teachers' CPD, support for identifying relevant resources, and observing classes (Kuźniar, 2021).<sup>103</sup> Strong links be-

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<sup>98</sup> Johnson, S.M., Kraft, M.A. and Papay, J.P. (2012). How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement. *Teachers College Record*, 114(10), pp. 1-39.

<sup>99</sup> Neves, I. (2007). A Formação Prática e a Supervisão da Formação. *Saber (e) Educar* 12, p. 79-95. Available at [http://repositorio.esepf.pt/bitstream/20.500.11796/716/2/SeE12A\\_FormacaolvoneNeves.pdf](http://repositorio.esepf.pt/bitstream/20.500.11796/716/2/SeE12A_FormacaolvoneNeves.pdf) Borko, H. (2004). Professional Development and Teaching Learning: Mapping the Terrain, *Educational Researcher*, 33 (8), pp.3-15.

<sup>100</sup> Johnson, S.M., Kraft, M.A. and Papay, J.P. (2012). How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement. *Teachers College Record*, Vol. 114, No. 10, pp. 1-39.

<sup>101</sup> Sprogøe, J. og Sunesen, M. S. K. (2021). Strategisk kompetenceudvikling, i Kort og godt om Kompetenceudvikling. *Dansk Psykologisk Forlag*

<sup>102</sup> Illeris, K. (2004). A model of learning in working life. *Journal of Workplace Learning*, 16(8), pp. 431 -441. DOI: [10.1108/13665620410566405](https://doi.org/10.1108/13665620410566405)

<sup>103</sup> Kuźniar, K. (2021). Dyrektor jako zarządzający procesem rozwoju zawodowego nauczycieli. *Edukacja Terapia Opieka*. 3, pp.25-47. <https://doi.org/10.52934/eto.134>



tween CPD providers and schools are also essential. Neves (2007) argues that training institutions should work closely with school-level supervisors to develop practical training.<sup>104</sup>

Leu and Price-Rom (2004)<sup>105</sup> highlight the promise of professional learning “nested within a whole-school improvement program” (p. 29). Øhara (2015) suggests that school development needs to be planned over the long term, and to be systematic. Regular, organized interactions with teachers can support the development of a community of practice and mutual commitment and help teachers to develop joint activities and a common repertoire – with improvements in student learning as the ultimate aim. Distributed school leadership and management can support school development as well.<sup>106</sup> Caena refers to work around professional learning communities, which build on the idea that knowledge and learning are embedded in a social context and experiences, and are nurtured through interaction and reflection (Caena, 2011).

School cultures valuing shared responsibilities and values, revolving around the concept of professional learning communities (PLC) (Caena, 2011)<sup>107</sup>. PLCs emphasise regular collaborative exchange of instructional

practices, and opportunities for critical reflection oriented toward learning, professional growth, innovation and knowledge sharing.<sup>108</sup> There is evidence that PLCs can support improvements in student learning when focused on both external research evidence, joint inquiry and the development of shared understandings and artefacts.<sup>109</sup>

School-level models for teacher collaboration include lesson study, include lesson study and co-teaching, joint practice development, classroom-based action research, data-informed instruction and data teams, or peer review where teachers analyse and discuss student achievement data systematically.<sup>110</sup> These different approaches may lead to changes in teachers’ instructional practices and content knowledge.<sup>111</sup>

There is an increasing focus on digital learning analytics to support evidence gathering (Halász et al., 2018). In co-teaching or team-teaching models, teachers’ plan, instruct and assess the same group of students, usually in a common classroom<sup>112</sup>. Teachers with different areas of expertise (e.g. general and special education)<sup>113</sup>, or levels of experience may be matched (e.g. novice and mentor)<sup>114</sup>.

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<sup>104</sup> Neves, I. (2007) Op cit.

<sup>105</sup> Leu, E. and Price-Rom, A. (2004). *Quality Of Education And Teacher Learning: A Review Of The Literature* Academy for Educational Development (AED), UNESCO.

<sup>106</sup> Øhara, M (2015). Halvor Bjørnsrud (Ed.) Gyldendal Akademisk

<sup>107</sup> Caena (2011). Op cit.

<sup>108</sup> Mitchell, C. and Sackney, L. (2000). *Profound Improvement: Building Capacity for a Learning Community*. Lisse, NL. Swets & Zeitlinger

<sup>109</sup> Louis, K.S., et al. (1996). Teachers’ Professional Community in Restructuring Schools, *American Educational Research Journal*, Vol. 33, No. 4, pp. 757–798

<sup>110</sup> Chapman, C. (2000). Improvement, Inspection and Self-Review. *Improving Schools*, 3(2), 57-63.

<sup>111</sup> Ibid.

<sup>112</sup> Hartnett, J., Weed, S., McCoy, A. Theiss, D, Nickens, N. (2013) ‘Co-teaching: A New Partnership During Student Teaching’ . *SRATE Journal*. 23 (1): pp. 1–12. Available at: <https://files.eric.ed.gov/fulltext/EJ1039898.pdf>

<sup>113</sup> Ibid

<sup>114</sup> Tinker Sachs, G. Fisher, T. & Cannon, J. (2011) Collaboration, mentoring and co-teaching in teacher education. *Journal of Teacher Education for Sustainability*. 13 (2), pp. 70-86.

At the individual level, Costa and Silva (2000)<sup>115</sup> highlight the importance of ensuring that teachers design and actively participate in the training process. In this way, teachers “build” rather than “consume knowledge” and integrate new practices in their own school and classroom contexts. Other international research has highlighted the importance of allowing teachers – as well as other stakeholders – to have a say about the CPD offer and other professional learning opportunities.

Small scale surveys in the partner countries highlight benefits of school- and teacher- evaluation. Maggopoulos and Svarna (2023) designed and implemented a small-scale study in Greece. Most teachers responding to the survey expressed support for linking teacher appraisal (external and internal) and CPD, as they see the purposes of evaluation is to help them to work more effectively and to support their students’ achievement. Kuźniar (2020), in a survey of 150 school directors found that the majority see benefits not only for teaching staff (81%) but also for the school overall (77%) and teachers’ motivation for development (67%). Teachers indicate that school leaders’ support, i.e. through observing classes and assistance in identifying relevant teaching resources has a significant impact on their improvement processes. (note, however, that in Poland most school development, still occurs outside of schools).

## Linking school and teacher development: school quality assurance

Most European countries combine some form of internal and external school quality assurance approaches, including: external school evaluation, school self-evaluation, teacher appraisal and national student assessments (European Commission, 2020)<sup>116</sup>. Ideally, these different approaches provide complementary insights on school and teacher performance and development needs.

Various studies have explored the effects of school self-evaluation bringing together school- and individual teacher evaluation. For example, Davidsdottir and Lisi (2007)<sup>117</sup> found that the process of school self-evaluation may lead to more classroom visits by the school leader, and allows teachers to develop a perspective beyond their own classroom, particularly when they are included in decision making.

Studies in project partner countries have found that teachers generally appreciate appraisal of their teaching practices. For example, Maggopoulos and Svarna (2023), found in their survey of teachers found that respondents see the evaluation focused on improvement as reward and recognition of their work, and motivation for further professional development. However, in cases where teacher appraisal is not well organised or its purposes is not clearly related to improvement, appraisal may be ineffective. (NB: while in Greece, there is no external school inspection or teacher evaluation. In-

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<sup>115</sup> Costa e Silva, A. (2000). A formação contínua de professores: Uma reflexão sobre as práticas e as práticas de reflexão em formação'. *Educação & Sociedade*. Vol XXI, pp 89-109. Available at: <https://doi.org/10.1590/S0101-73302000000300006>

<sup>116</sup> Ehren, M, Kudelova, D, and Looney, J. (2020). *Quality Assurance for school development*. European Commission Office for Official Publications of the European Communities.

<sup>117</sup> Davidsdottir, S., & Lisi, P. (2007). Effects of Deliberative Democracy on School Self- Evaluation' *Evaluation*, 13 (3), pp.371- 386.

ternal teacher appraisal is relatively recent, so follow-up studies on teacher perceptions will be important. So there are no concerns regarding negative consequences of evalu-

ation, some respondents to the survey that appraisal can lead to feelings of anxiety and competition).<sup>118</sup>

## 9.0 The design of Quality assurance frameworks and policy mechanisms

This section highlights literature on the design of a quality assurance frameworks and policy mechanisms to support its use. While CPD provision is centralised in some countries, in others, the CPD market includes players in private, non-profit and public sectors. Different policy mechanisms may be appropriate for the different country contexts.

As has been explored in previous sections of this review, effective CPD now extends well beyond short 'one-off' workshops and seminars to include school-based professional learning, linked with school improvement. Moreover, the effectiveness of CPD is mediated by several factors, including learner motivation and characteristics, in-school conditions and leadership, national/ regional or local policies, resources available and control (i.e. monitoring and evaluation).

The following elements are explored below:

- Developing a shared vision for teacher professionalism
- Quality frameworks setting out the key elements of effective CPD
- Policy mechanisms
  - Accreditation of CPD providers
  - Alignment with quality assurance frameworks
  - Support for whole-school approaches
  - Tools to support matching of school and teacher CPD needs, and CPD provision
  - Monitoring and evaluation of CPD
- Gaps in knowledge and research needs

### A shared vision of teacher professionalism

While there is a significant body of research on effective approaches to teaching, learning and assessment that can support evidence-informed practice (e.g. Hattie's ongoing work sharing effect sizes based on meta-studies, <https://visible-learning.org>),

<sup>118</sup> OECD (2018). *Education for a Bright Future in Greece*. OECD Publishing.

the understanding of teacher quality and professionalism is ultimately a normative endeavour. As noted by Caena (2014), “[a]ll that has to do with teacher preparation and practice is bound to be fraught with controversy, since it involves underlying ideologies and touches the sensitive ground of values and beliefs concerning the aims and objectives of schooling” (p. 315).

The literature highlighted in this review has emphasised a view of teachers as ‘reflective practitioners’, who are able to exercise professional judgement. Teaching is viewed as a lifelong learning profession: the emphasis is on continuous professional learning and the active engagement of teachers in their own and their colleague’s and school’s development. Supportive policies and school-level conditions – including quality assurance of CPD provision – are essential to teachers’ effective professional learning.

Ultimately, any CPD quality assurance system needs to be based on a clear statement of what counts as ‘good quality’ CPD. The involvement in representatives from different stakeholder groups in defining teacher professionalism can ensure that any definition represents a shared vision and understanding of teachers’ roles. Stakeholders include policy makers, school leaders and teachers, professional teacher associations, teacher unions, CPD providers, research organisations and civil society.

### **Quality frameworks setting out the key elements of effective CPD**

As noted in section 4.0, most European countries have developed teacher compe-

tence frameworks which set out general guidelines and expectations for teacher quality over the course of teachers’ careers (Halász, et al.).<sup>119</sup> While teacher competence frameworks may be considered as general guidelines for teacher development, professional standards set out more precise, measurable definitions of what teachers should know and be able to do. Standards – aligned with competence frameworks – can be more effectively linked to quality assurance processes. Examples of teacher professional standards may be found in Australia, Ireland and Scotland, but most countries have not developed standards systems.

Development of standards in collaboration with stakeholders can support ownership, take-up and continued engagement with any quality assurance framework (OECD, 2020)<sup>120</sup>. Stakeholder group involvement in the design of quality assurance systems, as well as in implementation and evaluation aimed at improvement can strengthen the overall system.

A recent project of the WELLCOME Foundation in the UK suggests several principles to underpin the development of a CPD quality assurance system, including:

- quality criteria should be practical, relevant and trusted by stakeholders;
- quality criteria should reflect the diversity of CPD providers, and should not create unnecessary cost, bureaucracy or restrictions;
- the quality assurance system should be sustainable;
- the quality assurance system itself should

<sup>119</sup> Boeskens, L., D. Nusche and M. Yurita (2020) Policies to support teachers’ continuing professional learning: A conceptual framework and mapping of OECD data. *OECD Education Working Papers*, No. 235. OECD Publishing. Available at: <https://doi.org/10.1787/247b7c4d-en>

<sup>120</sup> Boeskens, L., D. Nusche and M. Yurita (2020) Policies to support teachers’ continuing professional learning: A conceptual framework and mapping of OECD data. *OECD Education Working Papers*, No. 235. OECD Publishing. Available at: <https://doi.org/10.1787/247b7c4d-en>

- be evaluated through periodic data collection, stakeholder feedback and analysis;
- the quality assurance system should support CPD providers to make effective and efficient evaluation of the quality of provision and to make improvements;
- the quality assurance system should support school leaders and teachers to understand the evidence underpinning CPD, and to make effective and efficient decisions when choosing to work with CPD providers (including for in-school CPD),
- the quality assurance system should support system wide improvements in CPD quality, in building an evidence-informed teaching profession, and raising its status.
- teachers and school leaders influence should be pre-eminent in the system.<sup>121</sup>

To these principles we might add the importance of ensuring that CPD trainers (including those working in schools) have appropriate qualifications and opportunities for ongoing professional development (see section 7.0)

Models of the elements that shape the effectiveness of CPD provision – including factors that are directly related to CPD provision, as well mediating factors (e.g. school leadership, the school culture, etc.) – may also support the design of a quality assurance system.

Popova et al. (2016)<sup>122</sup>, in a study conducted for the World Bank propose an “In-service Teacher Training Survey Instrument (ITTSI)” to measure the impact of teacher CPD programmes. The instrument design is based a review of the empirical research on effective CPD and the authors’ own experiences in this field. Because the instrument is intended for use in middle- and low-income countries, the model also places emphasis on cascade models of training, which are frequently favoured in settings with fewer resources and intensive training needs (although the authors also call the effectiveness of the cascade model into question).<sup>123</sup> The initial draft instrument included 51 indicators, which was piloted it by collecting data on a sample of evaluated CPD programmes to check its validity. The authors also gathered feedback from expert researchers and CPD trainers. The final version of the instrument includes 70 indicators plus three pieces of metadata.

(NB: The authors provide further information on instrument development through online appendices, available here: <https://documents1.worldbank.org/curated/en/122031474915232609/pdf/WPS7834.pdf>)

<sup>121</sup> Chedzey, K., Cunningham, M. and Perry, E. (2021). Quality Assurance of Teachers’ Continuing Professional Development: Design, Development and Pilot of a CPD Quality Assurance System’, Available at: <https://chartered.college/quality-assurance-of-teachers-continuing-professional-development/>

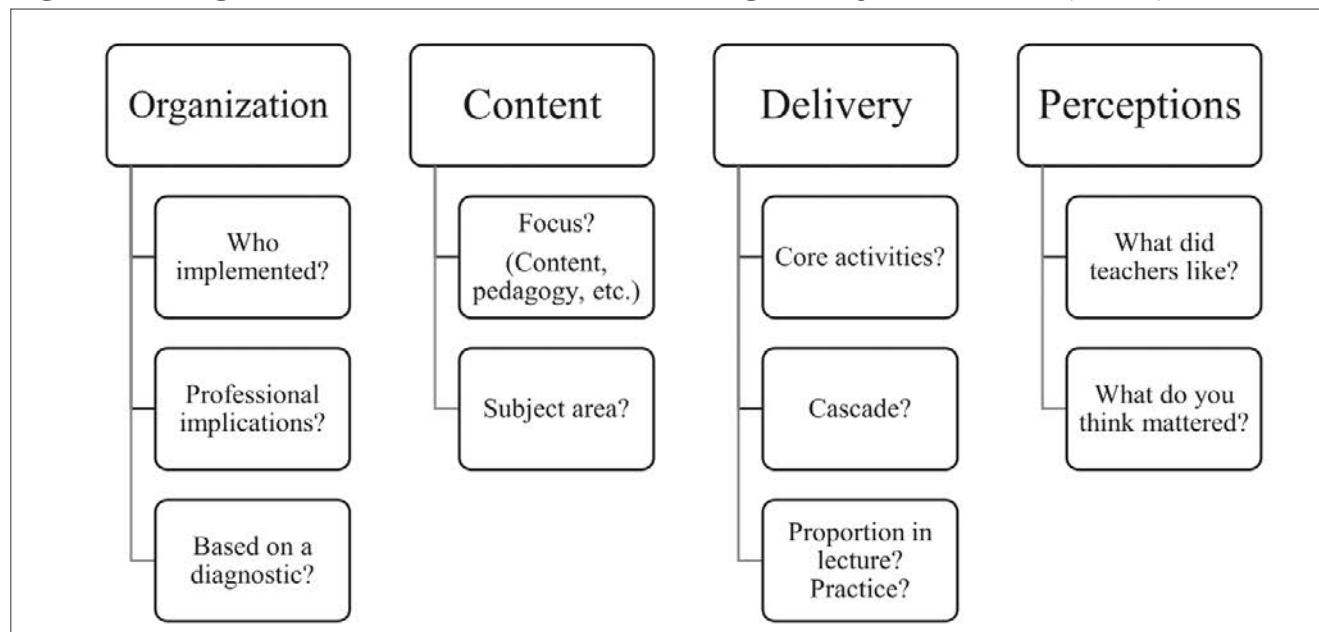
<sup>122</sup> Popova, A., Evans, D. K. and Arancibia, V. (2016). ‘Training Teachers on the Job What Works and How to Measure It’, *Policy Research Working Paper 7834*. World Bank Group, Africa Region. Retrieved from: <https://documents1.worldbank.org/curated/en/122031474915232609/pdf/WPS7834.pdf>

<sup>123</sup> World Health Organisation guidelines suggest cascade training may be more appropriate in cases where:

- Content is not significantly beyond the target audience’s current competency.
- The target audience is geographically dispersed.
- There are sufficient master trainers to cover the geographic area.
- Content is fairly straightforward, such as new policies or technical skills.
- The content can be taught in 2-3 days. (e.g. 4 weeks of content are difficult to teach in cascade training).
- Trainers can be supported via relief from their regular duties and via technical assistance by more experienced trainers. World Bank: [https://www.linkedimmunisation.org/wp-content/uploads/2021/01/4\\_BestPractices\\_Cascade-Training.pdf](https://www.linkedimmunisation.org/wp-content/uploads/2021/01/4_BestPractices_Cascade-Training.pdf)



**Figure 1: Design of the In-service Teacher Training Survey Instrument (ITTSI)**

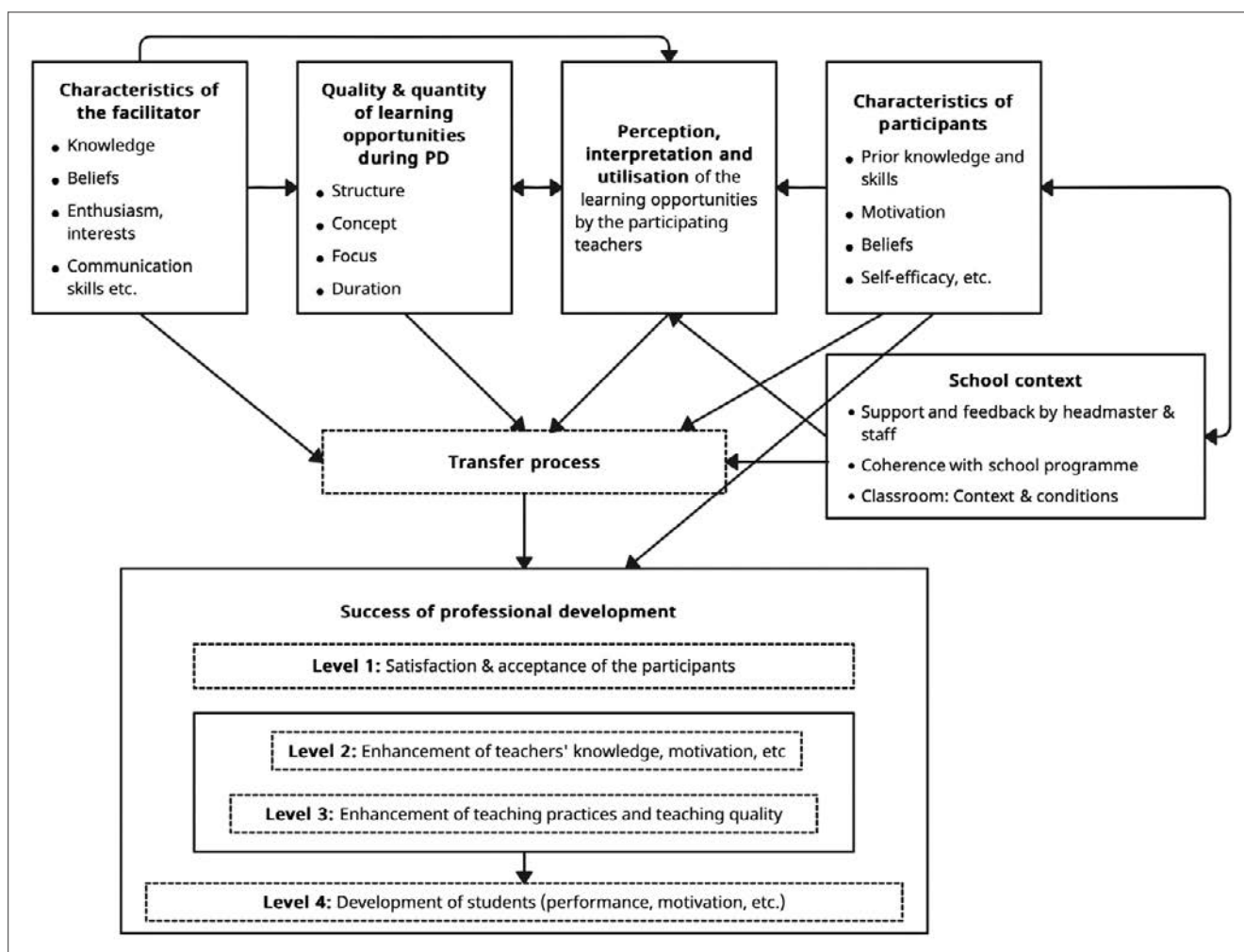


Source: Popova et al. (2016)

Kunter, Kleickmann, Klusmann and Richter (2013)<sup>124</sup> propose a somewhat different model, placing emphasis on the facilitator's characteristics (knowledge, beliefs, enthusiasm/ interests, communication skills, etc.); the quality and quantity of learning opportunities during CPD (structure, concept, focus and duration); perception, interpretation and utilisation of learning opportunities by participating teachers; the characteristics of the participants (prior knowledge and skills; motivation; beliefs, self-efficacy, etc.); and, the school context (support and feedback by school leader and staff; coherence with the school programme, classroom context and condition). The success of CPD is measured by: satisfaction and acceptance of the participants (level 1); enhancement of teachers; knowledge, motivation, etc. (level 2); enhancement of teaching practices and quality (level 3); and, development of students' performances, motivation (level 4). (See figure 2).

<sup>124</sup> Kunter, M., Kleickmann, Klusmann and Richter, D. (2013). The Development of Teachers' Professional Competence, In: Kunter, M., Baumert, J., Blum, W., Klusmann, U., Krauss, S., Neubrand, M. (eds) Cognitive Activation in the Mathematics Classroom and Professional Competence of Teachers. *Mathematics Teacher Education*, vol 8. Springer, Boston, MA. Available at: [http://dx.doi.org/10.1007/978-1-4614-5149-5\\_4](http://dx.doi.org/10.1007/978-1-4614-5149-5_4)

**Figure 2: Simplified offer-utilisation model for teacher training**



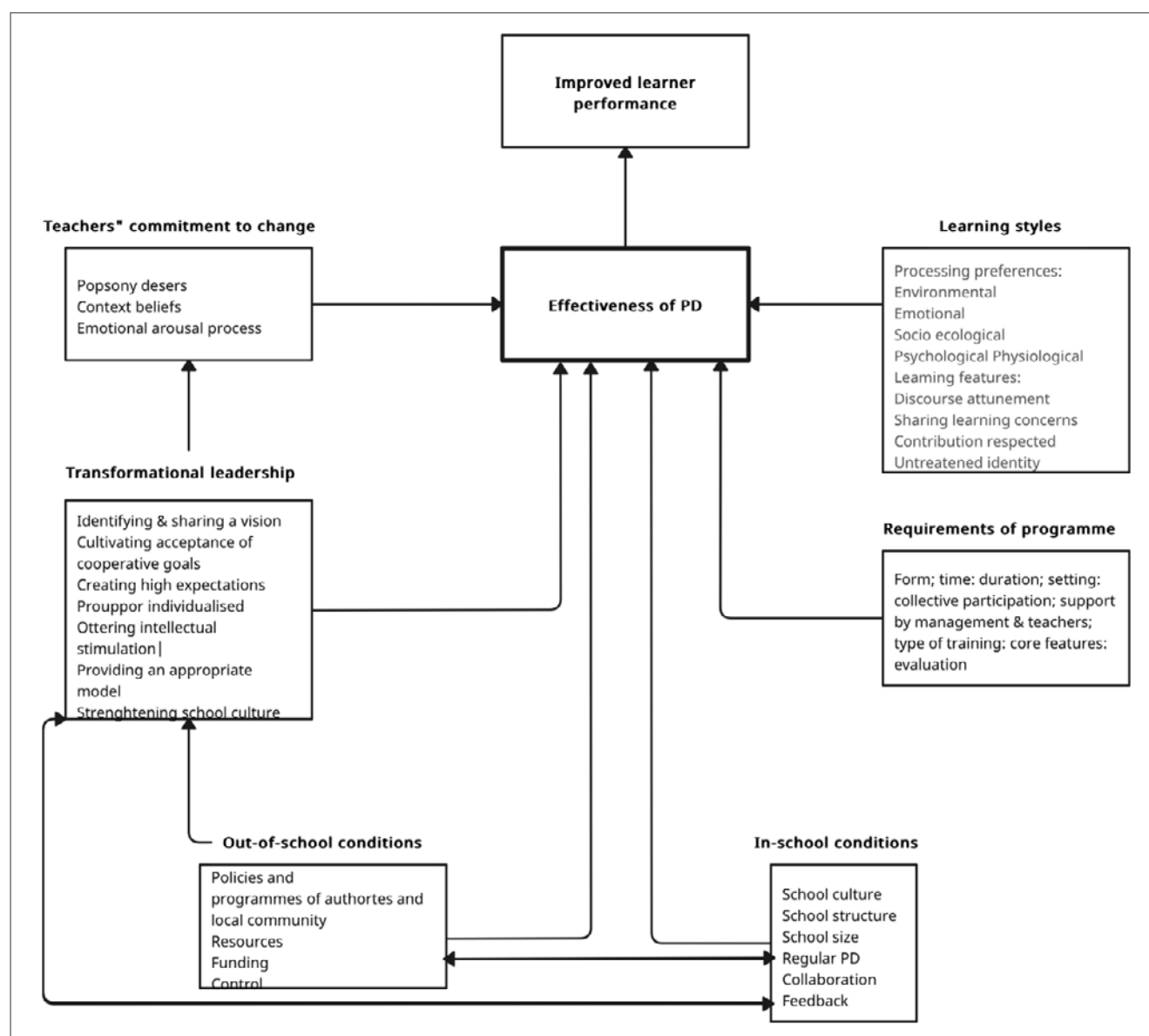
Source: Adapted from Kunter, M., Kleickmann, Klusmann and Richter, D. (2013) 'The Development of Teachers' Professional Competence' In: Kunter, M., Baumert, J., Blum, W., Klusmann, U., Krauss, S., Neubrand, M. (eds) *Cognitive Activation in the Mathematics Classroom and Professional Competence of Teachers. Mathematics Teacher Education*, vol 8. Springer, Boston, MA. [http://dx.doi.org/10.1007/978-1-4614-5149-5\\_4](http://dx.doi.org/10.1007/978-1-4614-5149-5_4)

Steyn and Niekerk (2005)<sup>125</sup> propose a similar model, highlighting both out of school (local policy; programmes, resources, and control) and in-school conditions (school culture, structure, size, regular PD, collaboration and feedback); the importance of transformational leadership in schools (creating and sharing a vision, setting high expectations, providing individualized support, setting an appropriate model and strengthening school culture) ; the requirements of CPD programmes (time, duration, setting, collective participation, support and management of teachers, type of training and core features, evaluation); and teachers'

commitment to change (personal goals, capacity and context beliefs, emotions) and their learning style (processing preferences, including the learning environment, psychological and physiological features – and learning features, including discourse attunement, sharing learning concerns, etc.) and, improved learner performance (see Figure 3).

<sup>125</sup> Steyn, G. and Niekerk, L.V. (2005). Professional development of teachers: Critical success factors, KOERS, *Bulletin for Christian Scholarship*. Vol. 70 No. 1. Available at: DOI:10.4102/KOERS.V70I1.262.

**Figure 3: Professional development of teachers: Critical success factors**



Source: Adapted from Steyn, G. and Niekerk, L.V. (2005). Professional development of teachers: Critical success factors. KOERS Bulletin for Christian Scholarship. Vol. 70 No. 1 DOI: [10.4102/KOERS.V70I1.262](https://doi.org/10.4102/KOERS.V70I1.262).

These different models do not set out relative impact of different factors. Several scholars suggest psychological factors have a more significant impact on teach-

er learning and mediate the influence of school leadership and organisational conditions.<sup>126 127 128 129 130</sup> Nor do they differentiate whether and how different aims for teacher

<sup>126</sup> Anderson, J.R., Greeno, J.G., Reder, L.M. & Simon, H.A. (2000). Perspectives on learning, thinking, and activity. *Educational Researcher*, Vol. 29, pp.11-13.

<sup>127</sup> Richardson, V. & Placier, P. (2001). Teacher change, In V. Richardson (ed.), *Handbook of research on teaching*, pp. 905-947. Washington D.C: American Educational Research Association.

<sup>128</sup> Putnam, R.T. and Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning, *Educational Researcher*, Vol. 29, pp. 4-15.

<sup>129</sup> Slegers, P., Bolhuis, S. & Geijssels, F. (2005). School improvement within a knowledge economy: Fostering professional learning from a multidimensional perspective, In N. Bascia, A. Cumming, A. Datnow, K. Leithwood & D. Livingstone (eds.), *International Handbook of Educational Policy*, pp. 527-543. Dordrecht: Kluwer Academic Publishers.

<sup>130</sup> Dam, G. ten & Blom, S. (2006). Learning through participation. The potential of school-based teacher education for developing a professional identity. *Teaching and Teacher Education*, 22, pp. 647-660.

CPD mediate different factors (for example, shorter CPD duration may be appropriate if learning aims are narrowly defined and straightforward<sup>131</sup>).

Examples throughout the review have provided indications of policy mechanisms that are important for a CPD quality assurance system. They include: accreditation systems, requirements for monitoring and evaluation of CPD; support for whole-school approaches that take into account both school and teacher development needs; tools to support diagnosis of teacher CPD needs (including standards), and information on availability of CPD provision to meet needs. Sufficient resources to support the quality assurance system should be made available.

As highlighted in the mapping of project partner countries, a few systems allow CPD providers, whether public, private or non-profit, to apply for accreditation (e.g. Poland). In the case of university-based CPD, departments are required to renew accreditation on a regular basis.

We found examples of quality assurance systems, including accreditation processes, that are guided by teacher professional bodies (e.g. in Australia, Ireland and Scotland). The General Teaching Council for Scotland (the GCTS) leads the system for post-qualification professional recognition, and guides accreditation of CPD. In Scotland, master's level professional recognition needs to be renewed every five years. Teachers apply for recognition based on a portfolio, which includes evidence of professional development from accredited CPD providers, and their expertise. The

portfolio includes documentation with programme details, evaluations, partnership arrangements, the teacher trainers' professional profiles, and how the CPD programme meets criteria for recognition (e.g. alignment with the national professional learning model, features of the CPD courses, and so on). Panel members reviewing programmes include GTCS council member/officer, external experts and a lay person (Perry, Boylan and Booth, 2019).<sup>132</sup>

### **Support for whole-school improvement and quality assurance**

Research reviewed in the previous sections highlights the importance of whole-school approaches to CPD, and policy can play an important role in supporting this approach. Szempruch (2022), for example, highlights changes initiated by the Polish Minister of National Education (regulation 201231 October 25) to bring teacher CPD closer to the school, and to support schools as learning organisations, including through internal school evaluation and an educator network that brings together various schools and institutions. The regulation also requires CPD providers to adapt their offer to adapt their offer to meet the needs of schools.

### **Tools to support matching of school and teacher CPD needs, and CPD provision**

As CPD moves away from short-term, one-size fits all workshops, it will be important to develop tools that allow identification of school-level and individual teacher development needs, particularly in countries with diverse CPD markets. The country mapping highlighted such approaches in Austria and Germany. Another example is from Australia, where an online 'Teacher Self-Assessment Tool' which teachers

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<sup>131</sup> Boeskens, L., D. Nusche and M. Yurita (2020) Op cit.

<sup>132</sup> Perry, E., Boylan, M. Booth, J. (2019). Quality Assurance of Teachers' Continuing Professional Development: Rapid Evidence Review. Available at: <https://wellcome.org/sites/default/files/quality-assurance-of-teachers-continuing-professional-development.pdfv>

can review their practice and professional training needs against professional standards (Révai, 2018)<sup>133</sup>. The standards are also linked to teacher registration requirements throughout Australia, and help teachers engage in professional learning that is aligned with the quality and common criteria elaborated in the standards.

Another example may be found in Norway, which in 2017 introduced a model for analysis of training needs at the local level, and collective forms of professional learning. The national authorities provide financial support for credit awarding CPD opportunities, as well as local authorities that organised collective in-service professional development.<sup>134</sup>

### Monitoring and evaluation of CPD

Currently, monitoring and evaluation of the quality of CPD provision does not occur on a systematic basis in most countries.

While evaluation may be more challenging in countries with an open market for CPD provision, there are some models of how this might work. The Norwegian Directorate for Education and Training, for example, which funds CPD provision at the local level, has set five quality criteria for CPD evaluation. They are: sustained duration; active learning opportunities; coherence with education policies and teachers' knowledge and beliefs; collaborative learning opportunities, and focus on subject and pedagogical content knowledge. The national directorate and the local governments survey school owners, leaders, and teachers about CPD, and students about their learning experience. This information is triangulated with student learning outcomes. Schools may use this information to evaluate teacher CPD experiences and their learning needs, and produce annual reports (OECD, 2020).<sup>135</sup>

## 10.0 Conclusion

This literature review has provided an overview of findings on effective, high-quality professional development for in-service teacher trainers. The review identifies ongoing debates on the appropriate focus

and methodologies for exploring effective teacher CPD. While early research on effective CPD focused on identifying specific elements of programme designs, based on controlled studies of programme impacts,

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<sup>133</sup> Révai, N. (2018). What difference do standards make to educating teachers? A review with case studies on Australia, Estonia and Singapore, *OECD Education Working Papers*, No. 174, OECD Publishing, Paris, <https://doi.org/10.1787/f1cb24d5-en>.

<sup>134</sup> OECD (2020)/ *Improving School Quality in Norway: The New Competence Development Model, Implementing Education Policies*, OECD Publishing. Available at: <https://doi.org/10.1787/179d4ded-en>.

<sup>135</sup> Boeskens, L., D. Nusche and M. Yurita (2020) Op cit.



the results of programme evaluations, surveys of participants, and so on. Studies consistently identified the importance of content-specific knowledge, the incorporation of active learning practices, sustained duration of training (including follow-up in teachers' school and classroom contexts), and the importance of developing in-school professional learning communities where teachers reflect on their practices and adapt approaches to their diverse learners' needs.

In recent years, several researchers have challenged empirical research focused on programme elements, noting that programmes that adopt these features are not consistently successful and that research might more productively focus on the processes and mechanisms of teacher learning. The need to adapt CPD to local and school contexts, and/or to online learning contexts, and to address trainees' specific needs has been highlighted.

Other researchers have also highlighted the need to focus on the importance of teachers' cognitive and emotional engagement, on the need to develop, and even challenge teachers' theoretical knowledge. CPD can support teachers to examine their convictions and beliefs, as well as to try alternative approaches to support improvement or change. Several have emphasised the need for teachers to regularly reflect on their practices, both individually and with their colleagues

The review has also highlighted research on the key role of school leaders in supporting teachers to participate in professional learning opportunities, and to ensure that training balances both on school and individual teacher development needs. School leaders may also foster the development in school professional learning communities.

Our research has also highlighted the scar-

city of existing quality assurance frameworks for teacher CPD. Indeed, attention to quality assurance for teacher CPD is fairly recent. In this review, we identified only a few examples of existing quality assurance systems and approaches. Based on the research on the effectiveness of CPD, however, we believe that there is a sufficient foundation to design and pilot an international quality assurance framework that may be adapted to different contexts and different professional learning needs.

Future academic and policy research work on effective CPD may also help to refine our knowledge base. Some areas for further exploration include:

- the features of effective online CPD, including peer assessment and online collaboration
- lessons learned on the design and implementation of whole-school improvement models
- the role of nonformal professional development in school settings
- effective approaches to supporting CPD trainers' professional development needs
- effective approaches to supporting school-level mentors' and coaches' professional development needs
- a better understanding of teachers' learning and the process of change
- the role of school leaders in supporting change processes, and their CPD needs

In line with current approaches to policy research, it will also be important to balance academic research with practitioners' knowledge and experience, as well as policy makers' insights. A collective design process, piloting, evaluation and improvement of a quality assurance framework will all be important steps in addressing the current gaps in this important area.

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# Annex 1: Country fiches

## Austria

### Governance

The Federal Ministry of Education, Science, and Research is the primary institution responsible for school education, including the organisation of instruction in public and private schools. Curricula for primary through secondary education are issued through Federal Ministry decrees. In 2023-24, a new curriculum for all schools, starting from the pre-school level was introduced.<sup>136</sup> Curriculum for primary schools is divided into a general section and into subject curricula.<sup>137</sup> As for lower-secondary schools, there are compulsory and optional subjects; schools can modify the standard organisation provided by the Federal Ministry of Education following a decision of the school community committee.<sup>138</sup> In upper-secondary schools, there are pre-vocational and academic schools. Academic schools are divided in three school types: Gymnasium,<sup>139</sup> Realgymnasium<sup>140</sup> and Wirtschaftskundliches Realgymnasium,<sup>141</sup> Oberstufenrealgymnasium.<sup>142</sup>

Although curriculum and assessment are centralised, schools have some autonomy in these areas. However, schools have a low level of autonomy in terms of school-level resource allocation.

### CPD provision

In Austria, university colleges of teacher education (Pädagogische Hochschulen) are responsible for in-service teacher training. In addition, some private/public institutions offer in-service teacher training, which needs to be approved by school principals to count towards teachers' mandatory in-service teacher training. Moreover, university colleges offer cooperation with private/public institutions and NGOs.

The Federal Ministry and the education directorates of the federal states (which collectively form the Board of Education) specify departmental focal points, which are offered by the teacher training colleges in further training courses.

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<sup>136</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/austria/organisation-and-governance>

<sup>137</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/austria/teaching-and-learning-primary-education>

<sup>138</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/austria/teaching-and-learning-general-lower-secondary-education>

<sup>139</sup> The focus is on a humanistic education with Latin and foreign language(s)

<sup>140</sup> The focus is on natural science subjects

<sup>141</sup> The focus is on economics-related subjects.

<sup>142</sup> Oberstufenrealgymnasium can be attended starting from the 9th grade. It offers various areas of focus, e.g. scientific and artistic subjects. Retrieved from: <https://eurydice.eacea.ec.europa.eu/national-education-systems/austria/teaching-and-learning-general-upper-secondary-education>

The Federal Ministry specifies how many hours of CPD teachers must complete:

- Primary level: 15 hours / school year compulsory for teachers, outside working hours
- Lower secondary level: 15 hours per school year, compulsory for teachers, outside working hours
- Secondary level II: 15 hours / school year optional for teachers on PD contracts, outside working hours

School leaders organise mandatory teacher training seminars for all teachers at the school ("SCHILF"), which count towards the 15 hours per school year. Since 2022, there is a mandatory induction phase (e.g. organised training at the Vienna University of Teacher Education, mentor at the school) during the first year of novice teachers.

### Access to training

Information on nationwide CPD offers is published on the website of the Federal Ministry of Education, Science, and Research. Teachers need to register for these events via the system 'PH-Online' to be granted leave by the school management or the school supervision to attend this event (depending on its duration). Teachers and schools receive a catalogue (CPD Index) for each registration phase and can choose courses online or on paper. The Federal Ministry recently announced an additional registration period each year (an increase from two to three registration periods), and a special summer programme).

CPD seminars are offered outside of working hours and on Saturdays; attendance during work hours is not typical (though principals may, if they think it is necessary, grant leave). Times may vary according to

school type, provider, subject, etc. and start times have recently been adapted to start later in the day to better accommodate teachers who teach in the afternoon.

In terms of measures aimed at supporting school-level improvement and professional learning, the Federal Ministry of Education, Science, and Research introduced the quality system management (IQES) platform to all schools in Austria.<sup>143</sup> CPD on how to use the quality management system, as well as a two-year mandatory certificate program for aspiring school leaders is also available.

### Recent changes and initiatives

In 2023-2024, a new curriculum for all schools (primary through upper secondary) was implemented in Austria. CPD related to the new curriculum is foreseen for all subjects at all school levels. Existing seminars in pre- and in-service teacher training are being adapted to meet the requirements of the new curriculum. The focus of the new in-service teacher training courses is on the general content of the new curriculum, subject specific content and methods, as well as assessment. CPD seminars are offered online and on-site.

The New 2023-24 Curriculum for all schools introduced a series of innovations from primary through upper secondary schools, including:

- focus on the development of subject-specific and interdisciplinary competences that are essential for a self-determined and successful life,
- better coordination in terms of content and structure to facilitate the teaching of overarching topics, the development of interdisciplinary skills, and the transition

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<sup>143</sup> See: <https://www.iqesonline.net/at/>



between primary and lower secondary level,

- encouragement of closer cooperation between teachers across subjects,
- guidance on the competences to be acquired by the end of the respective school level for teachers, guardians, and learners
- greater scope for contemporary and future-orientated lesson design, focusing on the essentials.

Austria has also introduced initiatives to support learner inclusion. The Federal Min-

istry of Education, Science and Research lists inclusion, diversity, social and gender equity as important topics and provides funding for CPD on these topics specifically. For 2024-25, CPD seminars on special education curricula are planned. Other measures include integration of learners with special education needs into mainstream schooling and establishment of zones of education priority targeting schools with low performance/high levels of poor literacy or a high share of migrant students.

## Denmark

### Governance

In Denmark, schools are owned and run by municipalities. Education is compulsory for ten years starting from the year the child turns six. Primary and lower secondary schools (years 1 to 9), are known as ‘Folkeskole’.<sup>144</sup> There is a final and optional 10th year, which completes primary and lower secondary education. Upper secondary education programmes are divided into general and vocational training programmes.

Curriculum and assessment are partially decentralised in Denmark. The municipal council approves the curriculum after which it becomes binding for the individual schools. Schools and teachers have some flexibility in implementing the curriculum and in choosing the pedagogical approaches that best meet the needs of their students. A variety of assessments are made available to help schools identify learners’ challenges and needs. Schools have a ‘medium level of autonomy’ regarding allocation of resources.

### CPD provision

In 2014, the national government implemented the Folkeskole reform aiming to enhance students acquisition of knowledge and skills, which has also led to a related focus on updating teachers subject teaching competences. CPD activities for pedagogues<sup>145</sup> and teachers in Folkeskolen are typically offered by university colleges, the Danish School of Education, and professional organisations. In Denmark CPD is provided by a variety of providers: private sector, universities, teacher associations, civil society, and the public sector. There are seven local university colleges that provide CPD for their region, and quality is assured by each university through their own quality assurance system according to legislation on university colleges.

As part of the 2014 Folkeskole reform, Denmark has set itself the goal of ensuring that every teacher has the necessary competences and qualifications for the subjects

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<sup>144</sup> [Overview \(europa.eu\)](https://european-council.europa.eu/media/e0604000-1234-4f40-9f12-68e28d04344c/default.aspx?document_id=11311)

<sup>145</sup> A pedagogue of the Folkeskole conducts preschool classes and cooperates with a qualified school teacher to carry out specific teaching activities in grade 1 to 3. [Pedagogue in Danish Primary School – English \(ufm.dk\)](https://ufm.dk/en/primary-school/primary-school-teaching)

they teach by 2020.<sup>146</sup> According to the Education and Training Monitor 2022, **Denmark “has yet to reach the objective of the reform.** In primary and lower secondary education, the aim of the 2014 Folkeskole reform was to improve the quality of education by ensuring that by 2020, 95% of lessons would be taught by teachers qualified in the subject they teach. The date has now been postponed to 2025, and the evaluation of the reform showed that key targets were not met. A recent agreement has made this goal optional for municipalities in grades 0-3). The government decided in May 2022 to release 8.8 million EUR (DKK 65 million) for 2022/23 to provide students with more teaching hours, guidance and feedback. In September 2022, a broad political agreement by the parliament set a new teacher education programme, and provided 16.8 million EUR (DKK 125 million) in 2023 and 26.9 million EUR (DKK 200 million) annually from 2023 onwards.”<sup>147</sup>

Teachers’ CPD must also be targeted and strategically focused on the areas where there is the greatest connection with the school’s goals and needs. Most schools and education institutions set resources aside for their pedagogues, teachers, and education staff to attend in-service training.<sup>148</sup>

Denmark indicates that they have some form of school-level quality assurance (e.g. school internal and external evaluation/inspection). There are no national teacher standards or competence frameworks. The national teacher union has made a catalogue of professional ideals, but they are not used within CPD.

## Recent changes and initiatives

Denmark has developed opportunities for transdisciplinary learning as well as initiatives to support basic skills development in reading, mathematics and/or science. Denmark indicates the introduction of differentiated or specialised tracks for learners.

### Policy reform 1:

Aftale [...] om et fagligt løft af folkeskolen  
(Agreement ... on an academic boost of primary and lower secondary school)  
(7 June 2013)

### Policy reform 2:

Fra folkeskole til faglært – Erhvervsuddannelser til fremtiden  
(From primary school to skilled worker - Vocational education for the future)  
(22 November 2018)

### Policy reform 3:

Aftale om det fremtidige evaluerings- og bedømmelsessystem i folkeskolen  
(Agreement on the future evaluation and assessment system in primary and lower secondary schools)  
(29 October 2021)

The number of pupils referred to special education from Folkeskolen has been increasing sharply, and the costs of special offers have been increasing and according to the latest total statement, amounts to approximately 30 per cent of the total expenses for primary school. At the same time, there is no documentation that students who are singled out for special schools and special classes do better academically than they would have done in its public school.

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<sup>146</sup> [9789264262430-8-en.pdf \(oecd-ilibrary.org\)](https://www.oecd-ilibrary.org/education/9789264262430-8-en.pdf)

<sup>147</sup> [Education and Training Monitor 2022 \(europa.eu\)](https://education-and-training-monitor-2022.europa.eu/)

<sup>148</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/denmark/teachers-and-education-staff>

To solve this challenge, the government has entered into an agreement with the national association of municipalities (KL) that more pupils must be included in mainstream education. A number of initiatives also have been launched to support the municipalities: New legislation on an inclusive primary school, follow-up on the transition to increased inclusion, the establishment of Inclusion Development – a national advisory

team for inclusion in day care – schools and leisure facilities, the establishment of the National Resource Centre for Inclusion and Special Education, information and attitude campaigns and the establishment of the Follow the Group for Inclusion, which must ensure support and dialogue among key parties to the goal of a more inclusive primary school.

## France

### Governance

The school system in France is centralised, with the Ministry of National Education (MEN) playing a significant role in resource allocation and curriculum development. However, there have been efforts to decentralise certain aspects of education in France, and to give schools more autonomy. For example, there are measures to empower school leaders and give them more control over school-level budget allocation and staffing decisions. This autonomy allows school leaders to allocate resources according to the school's and students' specific needs. Additionally, there are initiatives promoting greater involvement of local communities in school-level governance.<sup>149</sup>

In France, curricula in school education are prepared upon request from the Minister of National Education by the *Conseil Supérieur des Programmes* (CSP – Higher council for curricula). In 2013/14, the CSP implemented new educational curricula for all levels of compulsory education, including pre-primary. The new curricula, based

on a common framework of knowledge, skills, and culture, aim to provide students with the necessary tools to achieve their ambitions.<sup>150</sup>

### CPD provision

France has a range of providers for teacher CPD:

- the Ministry of Education: the Ministry often organises CPD programmes and initiatives for teachers and other education professionals. These programmes may cover a wide range of topics, including curriculum updates, pedagogical approaches, and professional skills development.
- Regional Education Authorities (Académies): each region in France is divided into académies, which oversee education at the regional level; académies may offer CPD opportunities for educators tailored to the specific needs and priorities of their respective regions.
- Teacher Training Institutes (Instituts Universitaires de Formation des Maîtres – IUFM): these institutes provide initial

<sup>149</sup> Education Policy Outlook France, OECD 2020 [France-country-profile-2020 \(oecd.org\)](https://www.oecd.org/fr/education/france-profile-2020/)

<sup>150</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/france/teaching-and-learning-primary-education/>

teacher training as well as CPD opportunities for in-service educators. They offer programmes and workshops aimed at enhancing teaching skills, subject knowledge, and pedagogical practices.

- Numerous educational associations and professional organisations offer CPD opportunities for educators. They may focus on specific subject areas, teaching methodologies, or educational innovations.
- Universities and higher education institutions often provide CPD programmes and courses for educators seeking to deepen their subject knowledge, pursue advanced qualifications, or explore research opportunities in education.
- Private Training Providers: private companies and organisations in France specialised in providing CPD for educators may offer workshops, seminars, online courses, and other professional development opportunities tailored to the needs of teachers and school leaders.<sup>151</sup>

The [Recteur d'Académie](#) approves training related to teachers' individual professional development. Training takes place primarily outside working hours and may be compensated. Moreover, in the framework of the *Droit Individuel à la Formation* (Individual training right, replaced by the *Compte personnel de Formation* - Personal Training Account – on January 1, 2017 for State civil servants), the teacher may receive an allowance only if the training takes place during holidays. The amount of the allowance is 50 per cent of the teacher's hourly pay. Regarding the *Congé de Formation Professionnelle* (CPF – Professional Training Leave for civil servants), the teacher, as a State civil servant, has the right to enrol in a training programme for one year maximum

and will receive a compensation at 85 per cent of his/her gross salary as well as a residence allowance. For State civil servants, this cannot exceed one year.<sup>152</sup>

### Recent changes and initiatives

The teaching profession in France faces challenges. The share of French teachers reporting that content, pedagogy and classroom practice in some or all subjects taught were not included in their initial education is higher than the average across the EU, and comparatively small shares of French teachers reported having undertaken continuous professional development. Statutory salaries for primary school teachers remain below the OECD average, reflecting years of stagnation and decline. Teachers in disadvantaged schools tend to have fewer qualifications than teachers in advantaged schools.<sup>153</sup>

France has introduced a few new initiatives in recent years, with implications for teacher CPD. They include:

- Pix+Edu
- Well-being Barometer
- Teaching Barometer

Each of these initiatives is described in more detail below.

#### Pix+Edu

To help students develop their skills and digital citizenship, the French Pix+ Édu scheme aims to strengthen the professional digital culture of teachers and education staff. This scheme, funded by the National Recovery and Resilience Plan, is aimed at

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<sup>151</sup> [Cnesco\\_CCI\\_formation\\_continue\\_Rapport\\_scientifique\\_coord\\_Malet\\_210226.pdf](#)

<sup>152</sup> [Continuing professional development for teachers working in early childhood and school education \(europa.eu\)](#)

<sup>153</sup> [France-country-profile-2020 \(oecd.org\)](#)

future teachers, trainees, as well as working teachers in public education and private education under contract. Designed as part of the Digital Strategy for Education 2023-2027, it has already enabled over 20,000 staff to train on the Pix.fr platform, with online courses accessible on a voluntary basis. Launched in October 2023, all teachers and educational staff now have access to a self-positioning tool, inspired by the European Joint Research Centre's DigCompEdu.<sup>154</sup> In under two hours, this voluntary online tool enables users to discover the system, assess their mastery of digital skills as part of their professional practice, and access training resources developed by Réseau Canopé. It takes the form of questions, differentiated according to the context of the teachers and educational staff, in primary and secondary education, which are adapted as they answer them. In two minutes to understand the process on video: <https://eduscol.education.fr/3839/developper-ses-competences-numeriques-avec-pix-edu>.

### Well-being Barometer

The well-being Barometer for national education staff was set up by the Ministry of Education to monitor and understand changes in the quality of working life among staff. It is also a tool for diagnosing the working conditions most conducive to improvement well-being at work. Designed to complement other existing statistical tools, such as the OECD's Teaching and Learning International Survey (TALIS) and the national school climate and staff victimisation survey, the Barometer provides regularly updated information based on represent-

ative national samples. Launched in 2022, the Barometer was conducted for a second time in 2023 and will be repeated every two years.<sup>155</sup>

### Teaching Personnel

The [law of July 8th, 2013](#) modified the regulations regarding teaching personnel of Chapter IV in the programming [law no. 2005-380 of April 23rd, 2005 for the future of school](#), which introduced Article L. 912-1-2 of the French Code of Education. It stipulates that all teachers be encouraged to take regular training courses. A range of continuing professional development courses tailored to the needs of teaching staff is offered through teacher training colleges. When it corresponds to a teacher's personal project which may contribute to improving their teaching and which has been approved by the rector, CPD is carried out as a priority outside teaching service obligations and may include compensation.<sup>157</sup>

### Teacher Appraisal

The aim of this reform is to provide opportunities for teachers to reflect on and discuss skills they have acquired and their prospects for professional development. This reform was launched in 2017 ([Decree n° 2017-786 5 May 2017](#)) and concerns the evaluation of teachers and other education and psychology staff working in the National Education system. Teachers rarely receive regular guidance throughout their careers, including regular intervals for career meetings, moments for individual exchanges on skills they have acquired and on opportunities for professional develop-

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<sup>154</sup> <https://publications.jrc.ec.europa.eu/repository/handle/JRC107466>

<sup>155</sup> [Le Baromètre du bien-être des personnels de l'Éducation nationale | Ministère de l'Éducation Nationale et de la Jeunesse](#)

<sup>156</sup> [Continuing professional development for teachers working in early childhood and school education \(europa.eu\)](#)

<sup>157</sup> [Article L912-1-2 - Code de l'éducation - Légifrance \(legifrance.gouv.fr\)](#)



ment. The scheduled evaluation meetings are planned as a time to look back over specific periods of the teacher's professional life. The meetings are planned on average every 7 years, at times when it seems relevant to take stock of the path covered professionally. Three such appointments are introduced to evaluate professional value: at rungs or tiers 6, 8, and 9 of the normal grades of teachers.<sup>158</sup>

### Integrating research

The Scientific Council of National Education was created to enable the entire educational community to benefit from the latest advances in research. Complementing

the work of the National Centre for School System Studies (Centre national d'étude des systèmes scolaires/CNESCO) and the general inspectorates, the Scientific Council takes a multidisciplinary approach, aiming to stimulate pedagogical reflection by making the results of cutting-edge research and field experiments available to all actors across the system. Its work also has an impact on the training of managers within the national education administration through the Institute for Advanced Studies in Education and Training (Institut des hautes études de l'éducation et de la formation). The Council's work is also intended to enrich the content of initial teacher education and continuous professional development.<sup>159</sup>

## Germany – North Rhein Westphalia (NRW)

### Governance

In the Federal Republic of Germany, the responsibility for the education systems is shared between the Federation and the Länder (the federal state, represented by the Ministry of Education and Cultural Affairs). The [Basic Law](#) (*Grundgesetz*)<sup>160</sup> defines the responsibilities of the Federation, while the administration of the education system falls almost exclusively on the Länder (including the school sector, higher education, adult education and continuing education).<sup>161</sup> In each Land (federal state), the Ministry of Education and Cultural Affairs develops curricula for school education, and teachers are bound to ensure that current

curricula are taught at their school.<sup>162</sup>

In each Land, a commission is appointed by the Ministry of Education and Cultural Affairs to design a new curriculum or review the existing one. Teachers and school directors are included in the process, as well as school inspectors, representatives of the school research institute of the federal state concerned and experts in the relevant disciplines from institutions of higher education. The commission may also consult with associations, universities, and parents' and students' representative bodies during the process. Once the final curriculum (or education plan) is approved and intro-

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<sup>158</sup> [Rendez-vous de carrière : mode d'emploi \(education.gouv.fr\)](https://education.gouv.fr)

<sup>159</sup> [Le conseil scientifique de l'éducation nationale \(education.gouv.fr\)](https://education.gouv.fr)

<sup>160</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/legislation-and-official-policy-documents>

<sup>161</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/overview>

<sup>162</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/teaching-and-learning-primary-education>

duced by the commission, in some Länder (federal state) there are training opportunities for in-service teachers to implement the new or reviewed curriculum.<sup>163</sup> In North Rhine Westphalia, regional implementation events with school administrators are organised as multiplier events by the school supervisory authority. Clear orders for further training are only issued in the rarest of cases. Textbook publishers also embark on a revision or completely new edition of their titles. A central database with curricula or education plans for schools providing general education is accessible on the [website](#)<sup>164</sup> of the Standing Conference.

Schools may write curricula on school level in accordance with the centralised curricula which allows them certain autonomy within lesson planning and assessment. Centralised assessments are administered in years 8, 10 and 13.

### CPD provision

Germany has a range of providers for teacher CPD. Providers include university-based, private-sector, teacher associations, civil society stakeholders and public sector (ministry-run) providers. District governments offer CPD for school executives, certificate courses as well as specific CPD for vocational colleges and coordinators for questions of equality.

In North Rhine-Westphalia the work on CPD is divided between the Ministry of Education and Cultural Affairs, the district governments, and the local education authorities. Federal State CPD in North Rhine-Westphalia is organised in 53 regional teams and done by moderators (teacher trainers). Moderators (teacher trainers) are teach-

ers that are qualified for this task and work part time in school and as teacher trainers. There are two major CPD: school development and education development. The district governments offer CPDs for school executives, certificate courses, as well as CPD targeted to vocational colleges and coordinators managing issues of equality.

There aren't differences in the range of public or private providers within school systems. In other words, schools and teachers may book training with any type of provider. Public providers are regional district governments. The state trainers are teachers recruited from schools who spend part of their working time as trainers. The programmes offered by the public sector are coordinated with the school supervisory authority and are guaranteed to meet the curricular requirements. Private providers can be companies, NGOs, associations, universities etc. Public providers offer free CPD, the others need to be paid for.

CPD at the Länder level is mandatory for teachers but there are no requirements related to issues such as hours of participation. Teachers are legally committed to take part in CPDs on a regular basis. on the one hand in order to ensure continuous professional development and quality control, and on the other hand in order to maintain and develop their skills and knowledge. CPD is mandatory for:

- certificates (e.g. to teach additional subjects),
- to become school director
- inclusion (e.g. international teachers, teachers entering the profession through alternative pathways)

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<sup>163</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/teaching-and-learning-primary-education>

<sup>164</sup> <https://www.kmk.org/kmk/information-in-english.html>

Twice a year school directors organise mandatory in-house teacher trainings for all teachers in schools (SchILf) for certain school related topics. Sometimes teachers offer short micro-trainings for other colleagues on selected topics.

Each district government has a strong board of inspectors that not only deal with CPDs but with schools in general. Every CPD training held by moderators (trainers) will be revised by the inspectors in terms of hours, tools and content. Only “smaller” CPDs (meaning everything below 8 hours attendance like workshops, networking, and coaching) is not revised by them. The training department is responsible for supervising the training programme concerning quality and relevance. There is no supervision or limitation for teacher training offered on the free market.

All CPD trainers from the district government may earn a qualification to be a moderator and trainer following a 12 full working day course. To become a CPD trainer for school development there is an additional qualification 12 full working day training requirement.

Policy guidelines encourage providers to align courses with teacher competence frameworks or teacher standards. There is a quality framework called “Referenzrahmen Schulqualität NRW” and CPD is provided by the district governments/federal state and aligned with this (i.e. new curricula, digital competences, standardised tests including for school graduation). The guidelines are not extended to private / NGO providers. Non-formal CPD (e.g. community partners, school-level professional learning communities, networking, bar camp events) is encouraged and promoted by district governments.

Schools can dedicate financial resources toward non-formal learning as part of their school improvement plan. They can use the free CPD budget for any professional development they consider relevant; and sometimes buy certain tools or online platform access for teachers to support their CPD. Schools have access to bespoke training to support specific needs. Each school has their own CPD coordinator. All schools within a municipality can contact the CPD coordinator at city/communal level. Also, if schools are involved CPDs for school-level development, they have trainers who tailor the support to their specific needs, in line with a given framework (i.e. the the QUA-LiS NRW for school quality <https://www.schulentwicklung.nrw.de/referenzrahmen/>).

### **Access to training**

Teachers can choose the courses that are interesting or relevant for themselves. School directors can also suggest CPDs to certain colleagues. CPDs for career advancement are mandatory and provided by the district governments. There are also initiatives like the “Digitaloffensive” where the ministry of education decided on CPDs. Each school has its own CPD coordinator who is supposed to promote relevant CPDs to teachers and evaluate and reflect supply and demands with the principal.

In NRW, there is a platform that is being developed called “FORMAT” that will possibly be free and GDPR compliant for all schools in NRW. The platform is supposed to help schools diagnose and identify needs for CPD, thereby supporting the work of the school-level CPD. At the moment 60 schools are involved in the piloting phase. All schools within a municipality can contact the CPD coordinator at city/communal level.

## Recent changes and initiatives (state and national)

The North Rhine Westphalia (NRW) federal state government's aim is to overcome social disadvantages in education. With the talent schools ("Talentschulen NRW" - schools for gifted learners), the NRW coalition is implementing an important measure for more equal opportunities. The school trial is intended to show whether the performance and success of pupils at schools in areas with major social challenges can be demonstrably improved through innovative teaching, additional resources, and support for school development. In cooperation with all those involved, the local talent schools should also make a positive contribution to neighbourhood development.

At the national level, Germany has introduced initiatives to support learner inclusion. The emphasis is on supporting diverse learning needs. Differentiated or specialised tracks for learners have been introduced in NRW, as well as initiatives focused on specific target groups (e.g. migrant, Roma, and special education needs (SEN) learners).

Digital tools are also emphasised in regard to classroom-based student assessment. NRW in Germany has targeted specific competence areas including STEM and digital competences. It has also introduced competences cultural awareness and instruction (with the latter highlighting multicultural education and targeting foreign-born students). NRW has also introduced support for blended learning (i.e., blending digital and face-to-face learning).

At the national level, Germany has introduced initiatives to support basic skills development in reading, mathematics and/or science.

Other recent policy initiatives include:

Medienkompetenzrahmen (Media Literacy Framework): The main objective of the [Medienkompetenzrahmen NRW](https://www.schulentwicklung.nrw.de/lehrplaene/lehrplannavigator-s-i/) is to integrate digital media competences into the curriculum of primary and secondary education. It was developed on the basis of the KMK (Kultusministerkonferenz) decision on including digital media in the classroom for all schools in Germany. This includes fostering a safe, creative, and responsible use of media among students. All curricula have been adapted by committees of the QUALIS NRW to include the Medienkompetenzrahmen in as many subjects as possible <https://www.schulentwicklung.nrw.de/lehrplaene/lehrplannavigator-s-i/>

## Referenzrahmen Schulqualität (School Quality Reference Framework)

The North Rhine Westphalia School Quality Reference Framework was first launched in April 2014. The Framework outlines features of a good school and of high-quality teaching. It compiles quality statements with the aim of making these features transparent for all school stakeholders. The Referenzrahmen Schulqualität was renewed in 2020 and can be found here:

<https://www.schulentwicklung.nrw.de/referenzrahmen/>

Due to social developments and current challenges in the school system - for example in the area of teaching and learning in the digital transformation - an updated version of the NRW School Quality Reference Framework was made available in 2020. The NRW school quality reference framework summarises, in a central document, the diverse ideas and requirements of 'good schools' and 'good teaching' from the perspective of educational, school and teaching research as well as the current education policy debate. It uses criteria and

statements to show what is understood by school quality in key content areas and dimensions and it summarises the quality concepts of projects and initiatives for quality development in the state of NRW.

The NRW School Quality Reference Framework Reference Framework organises the overall complex of school and teaching quality into six content areas, to which 38 content dimensions are assigned for structuring and accentuation. These are specified by criteria. Explanatory statements differentiate and explain the criteria and thus provide clear indications for understanding the content areas. The content area results and effects clarify the expected results in terms of target perspectives that are to be achieved through the organisation of educational work. The content areas of teaching and learning, school culture, professionalisation and leadership and management describe the quality of the central pedagogical and organisational processes that are designed by the autonomous school with a view to the results to be achieved in the content area results and effects. The content area on framework conditions and binding requirements focuses on the local conditions and binding principles that are of great importance for schoolwork, but which a school itself can only help to shape or influence to a limited extent.

With regards to CPD, in 2019 a commission of experts was formed to look at teacher training in the state of North Rhine-Westphalia and made concrete reform suggestions which are now ready for signature at the ministry. Initial implementation is planned for the start of the 2024 school year.

- Emergency remote learning during the height of the Covid-19 pandemic has recently led to a clear trend towards digital media. In particular, the focus has also shifted to training with the support of distance learning methods. There is an overarching agreement with the staff councils, which means that significantly more training can now be provided in distance learning formats.
- North Rhine-Westphalia is following the European call for inclusion and has ratified it. As a result, many pupils from special schools are now being taught at mainstream schools. This has led to an increased need for further training over the last decade, although this was not organised by the ministry. It was organised in response to the needs of the schools as part of the tasks of state teacher training.

School development counselling has established itself as a very large part of state teacher training over the last decade and contributes significantly to the systemic development of schools. In North Rhine-Westphalia, it is closely interlinked with the topic-specific teacher training programme and thus supports the specific needs of schools and colleagues, for example on topics related to school organisation, individual development, or lesson-specific development. Their mission is firmly anchored in the ministerial training decree. Consultants work part-time for the further education system in North Rhine-Westphalia.



## Governance

School education in Greece is fairly centralised. The Ministry of Education and Religious Affairs is responsible for administration of schools. The Minister of Education is supported by advisory bodies and institutions. Key responsibilities include curriculum development; textbooks; teacher policies. The Institute of Education Policy (IEP), which is one of the main advisory bodies to the Minister, was founded in 2011. IEP's responsibilities include coordination of research and technical support for primary and secondary schools, teacher training, and efforts to tackle learner inequalities and early school-leaving. The IEP also supports matters related to school and teacher evaluation.<sup>165</sup>

Regional education directorates are responsible for administration and implementation of national education policy, as well as scientific and pedagogical guidance for the region (tailored to local context). Local directorates of primary and secondary education and school units report to the regional directorate. Schools are supported by a school committee, municipal committee of education and parents' associations.<sup>166</sup>

Recent reforms allow local directorates and schools some more autonomy to plan and organise their work. This includes limited autonomy regarding curricular content and intended learning outcomes.<sup>167</sup>

All primary schools in Greece follow a common curriculum which sets specific intended learning outcomes. However, teachers

have some autonomy to enrich this curriculum or choose their own methods and didactic approaches to help students achieve the expected outcomes. Differentiated teaching is at the core of the reform the Ministry of Education wishes to introduce therefore teachers are encouraged to adapt their lessons so that no child feels unable to participate.

Assessment is not emphasised in primary education and there is no specific example of how students should be assessed in each subject. Teachers design their own tests on condition that they take into consideration the central guidelines which focus on students' improvement.

In lower secondary education (Gymnasio) the curriculum is centralised and teachers' autonomy is limited. Differentiation is again inherent in the way students should be taught and assessed teachers find it challenging to adapt approaches appropriately. There are national exams at the end of the school year, but each school has the autonomy to develop their own tests.

In upper secondary education (which is not compulsory) the curriculum is tighter and teachers' autonomy is more limited. There are exams at the end of the school year on a national level but not with common content. Each school again has the autonomy to choose their own test questions but half of these should be taken from a central "test bank" which is hosted on Institute of Educational Policy's (IEP) platform (<https://iep.edu.gr/el/trapeza-thematon-arxiki-selida>).

<sup>165</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/greece/organisation-and-governance>

<sup>166</sup> Ibid.

<sup>167</sup> Ibid.

At the last class of upper secondary education (Lyceum) there are also university entrance exams which are set at the same time and on the same days all over Greece. Examination content is developed by a central board, formed by the Ministry of Education. The content and questions for each subjects being tested are chosen a few minutes before the examinations begin and is sent electronically to all schools at the same time.

### CPD provision

CPD in Greece encompasses a broad range of activities: formal courses, seminars, conferences and workshops, online training, and mentoring and supervision.

There are multiple providers for in-service teacher training in Greece. The Ministry of Education is the main provider through IEP. The IEP online platform hosts central teacher training for newly appointed teachers. This platform also hosts online teachers' trainings for various subjects. Since new curricula were introduced in 2021, IEP has hosted massive online trainings (both synchronous and asynchronous) both on the content of the new curricula and on new teaching approaches and strategies.

At a regional and local levels, educational counsellors (replacing the role of school advisors) offer more focused training in their area of specialisation (i.e. English teachers are trained by the educational counsellor of English, etc). The education counsellors also have the right and the duty to deliver seminars and trainings on pedagogical matters.

Training Support Centres (PEKES) operating at a regional in the Regional Directorates

for Education, also provide CPD training.<sup>168</sup> Recent legislation, n.4823/2021 requires school heads to decide on and design at least 15 hours' teacher in-service training each year.

Universities are among CPD providers. Each University has the autonomy to run their own trainings, mostly through their centres of lifelong learning. Moreover, universities can organise conferences, seminars, and other courses in various thematic areas, where teachers can participate and take credentials. The majority of them also have online courses or MOOCs where teachers can enrol and attend at their own pace.

Teachers' associations or scientific associations are also among the providers of in-service teacher training. Usually these trainings take place locally or are school based. In the light of this, NGOs or other stakeholders may be invited to deliver teacher training based on the needs analysis of each school unit. Sometimes in-service training is delivered by teachers who have the proper qualifications and who serve at the school. For the most part, these are teachers with expertise in ICT, special education and intercultural education since these areas are priorities for teachers' training.

CPD is both mandatory and optional. Mandatory forms (as stated in the Presidential Decree 250/92) include:

- Induction training, which has a duration of at least 100 teaching hours for candidates to be appointed as Primary and Secondary Education teachers.
- Periodic training – twice in an academic year – which for permanent teachers lasts up to three months.

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<sup>168</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/greece/continuous-professional-development-teachers-working-early>

- Short-term specific training programmes last from 10 to 100 hours for all teachers and 200 hours for teachers serving in special education units.<sup>169</sup>

CPD courses are decided at a central level by the IEP and at the local level by school leaders. Decisions on training needs are related to national priorities and educational policies and, at a local level, they are related to each school staff's needs and the school's internal evaluation and action plan.

### Access to training

As noted above, the IEP has developed a platform where both synchronous and a-synchronous teacher trainings are held. Examples of training courses implemented by the IEP include:

- special education and training, including specialised educational support for the integration of students with disabilities and / or special educational needs
- new curricula for foreign languages - Unified Curriculum of Foreign Languages (EPS-XG) and English Learning Programs in Early Childhood (PEAP)
- religious education
- education of refugee children
- apprenticeship issues<sup>170</sup>

### Recent changes and initiatives

In 2021, a new curriculum for primary education was introduced and teachers were required to attend online trainings run by the IEP and by educational counsellors (mainly in smaller groups and in person). There is also new curriculum and new books for some subjects in secondary education, with the same policy regarding teachers' trainings.<sup>171</sup>

The new curricula are based on the following principles, which put students at the centre of teaching and learning:

- high expectations tailored to each student
- coherence
- meaningful learning and community connection
- inclusion
- basic principles - Elements of teaching methodology
- metacognitive skills (learning to learn)
- preparing for the future

During the 2021-22 and 2022-23 school years, the action "Pilot Implementation of Study Programs in Primary and Secondary Education" was implemented by the IEP, in all Model Schools<sup>172</sup> and the Experimental Schools<sup>173</sup> of the country, ([Ministry Decision 104671/GD4/2021](https://www.minedu.gov.gr/en/Ministry-Decision-104671/GD4/2021)) within the frameworks "Upgrading the Study Programs and Creat-

<sup>169</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/greece/continuous-professional-development-teachers-working-early>

<sup>170</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/greece/continuous-professional-development-teachers-working-early>

<sup>171</sup> See: <https://iep.edu.gr/el/nea-programmata-spoudon-arxiki-selidaa>

<sup>172</sup> Model Schools are school units of secondary public education, which aim to cultivate and disseminate excellent practices across the educational system. Teachers in these schools have more formal qualifications and teaching experience. Students are admitted to the schools the first grade of secondary education. Admission is based results of examinations, which are held every year (20 - 25 June), under the supervision of the Board of Model & Experimental Schools.

<sup>173</sup> New curricula and timetables, teaching tools, textbooks and other educational material, teaching methods, ways of administration and operation of the school unit are piloted in experimental schools (pre-school, primary and lower and upper secondary education). Pilots are designed by the Ministry of Culture, Education and Religious Affairs in consultation with the IEP, universities or research centres related to education, as well as with the IEPC or the school units themselves. Teachers in these schools have increased formal qualifications and appropriate scientific and pedagogical training and teaching experience. The admission of students to the experimental schools is based on a lottery system, in order to ensure studies are based on as random a sample.

ing Educational Materials for Primary and Secondary Education Act” and “Training of Teachers in the Study Programs and educational materials for Primary and Secondary education Act”. Beginning in the 2023-2024 school year, these programmes are being implanted across the entire school system.

According to law, n.4823/2021, school leaders are obliged to decide on and design teacher in-service training in line with school- and individual teacher professional development needs (with training for at least 15 hours a year). Teacher participation

is optional, but most teachers do take part. Educational consultants are officially responsible for teacher training in local level, and they can be invited at schools to carry out in-service training.<sup>174</sup>

In 2020, the Ministerial Decision under the title: “Start of action: Fast training of teachers in distance education” (ref.no. 174545 / E3 / 28/12/ 2020) was published to provide rapid training to teachers on pedagogical and didactic approaches in distance education, from primary through secondary education.<sup>175</sup>

## Poland

### Governance

Until the 1990s, the 8-grade primary school system was the only form of compulsory schooling. Since the political transition in the 1990s, the Polish education system has undergone several major reforms. In 1997, the Constitution of the Republic of Poland integrated references to compulsory education. Under a 1999 reform, compulsory schooling was extended by one year under a structure of 6 years of primary school and 3 years of lower secondary school (gymnasium). Following the adoption and entry into force of the Education Law Act (1 September 2017), compulsory schooling was once again defined as including the 8-grade primary schools. In accordance with the 2017 Act, compulsory school may be provided by a public or private secondary school or through vocational training with an employer.

Compulsory education in Poland is now divided into:

- **one-year compulsory pre-school preparation** („zerówka”);
- **compulsory education** (requirement to attend school) which starts at the beginning of the school year in the calendar year when the child reaches the age of 7 and lasts until the completion of education in the primary school, but not beyond the age of 18;
- **compulsory education for primary school graduates** until the age of 18, which may be fulfilled at a secondary school or as part of vocational training with an employer or by attending classes at an educational establishment..<sup>176</sup>

<sup>174</sup> The education advisor provides pedagogical and scientific guidance of teachers and members of the E.E.P. and Special Assistants (S.A.P.), training, develops innovative initiatives in the field of education, and participation in the process of school (and support structures) collective planning and self-evaluation of the work of the school. The advisor supports daily teaching and educational needs, observes lessons and presents sample lessons, monitors and supports the school laboratories and libraries.

<sup>175</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/greece/continuous-professional-development-teachers-working-early>.

<sup>176</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/organisation-education-system-and-its-structure>

School governance from pre-school through upper secondary school levels or vocational school of first or second levels depend mostly on local authorities at the commune (*gmina*) or district (*powiat*) level. In recent years there has been an expansion of the private education sector, which receives public funding, which and which has a high degree of curricular autonomy.<sup>177</sup>

<sup>178</sup>Non-public schools implement curricula taking into account the core curriculum of general education, and in the case of a schools providing vocational education - also the core curriculum of vocational education. Non-public schools carry out compulsory educational activities for a period not shorter than and for a duration not less than the total number of individual compulsory educational activities specified in the framework teaching plan of a public school of a given type. They document the teaching course established for public schools and organise the school year in the same way as public schools. Similarly, public schools have framework teaching plans in accordance with the regulation of the Minister of National Education (Journal of Laws of 2024, item 80). The framework teaching plan specifies, among other things:

1. weekly, and in the case of schools conducting part-time classes – semester-based, number of hours for students allocated to: compulsory educational classes in the field of general education, in the field of vocational education, classes with a tutor, in particular classes related to important social problems:

health, legal, financial, climate and environmental protection;

2. minimum weekly number of hours of rehabilitation classes for disabled students;
3. minimum number of hours of classes in the field of career counselling.
4. weekly, and in the case of schools conducting part-time classes – semester, hours at the disposal of the school leader.

Although curriculum and assessment are more centralised in the public school sector, than in non-public sector, schools have a relatively high degree of autonomy. They also have relatively high autonomy for school-level resource allocation.

### CPD provision

CPD is an integral element of professional development and a statutory obligation. CPD is provided by public institutions (teacher training institutions, higher education institutions (HEIs) and other institutions (e.g. continuing education centres, teacher training centres, provincial methodological centres) whose statutory tasks are related to continuing professional development of teachers)<sup>179</sup> subordinated to the Minister of National Education and other ministries relevant to their activities, as well as public and non-public teacher training institutions. According to Article 184 (1) of the Education Law, in-service training

<sup>177</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/organisation-and-governance>

<sup>178</sup> Legal entities and individuals may establish non-public schools after obtaining an entry in the register kept by a local government unit obliged to run the corresponding type of public schools. This is the case for non-public schools. According to Article 26 (1) of the Law on Financing Educational Tasks, non-public schools where compulsory education or schooling is fulfilled receive a subsidy for each student from the budget of local government units, which is the registering authority for these institutions. The amount of such subsidy is equal to the amount provided per student in the educational part of the general subvention for the local government unit.

<sup>179</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/continuing-professional-development-teachers-working-early>



centres are obliged to obtain accreditation, which is a confirmation that a given centre ensures high quality of the conducted forms of in-service training for teachers. Accreditation is assigned by the Superintendent of Education for a period of 5 years.<sup>180</sup>

CPD is provided in a variety of formats, including consulting on teaching methodologies, and/or support for schools, co-operation networks, training, seminars, workshops, conferences and others.

There are qualification requirements for CDP trainers in teacher training institutions in accordance with the Regulation of the Ministry of National Education of May 28, 2019. The regulation specifies: 1) the conditions and procedure for establishing, transforming and liquidating, as well as the organisation and operation of teacher training institutions, including the scope of their mandatory activities; 2) the tasks of methodological advisors, conditions and procedures for entrusting teachers with these tasks; 3) tasks that can only be performed by accredited teacher training facilities and public teacher training facilities referred to in Art. 8 section 5 point 1 letter b, section 6, section 7 point 2 and section 14 of the Act of December 14, 2016 - Education Law.

The CPD system for teachers covers three levels: national, regional and local.<sup>181</sup>

1. CPD at the national level:
  - national-level in-service teacher training institutions;
  - national-level teacher training projects based on national policies and priorities developed by the Ministry of National Education);
2. CPD at the regional (province) level:
  - systemic support measures for teachers in the area of teaching methodology;
  - systemic measures supporting teachers in the implementation of national-level training projects;
3. CPD in local government units:
  - development of local school education systems;
  - development of school plans

At the national level, public CPD institutions have the following tasks:<sup>182</sup>

- design and implement national in-service training programmes for teachers and school leaders and other educational and training institutions, in line with the needs of the school education system;
- support public in-service teacher training institutions, counselling and guidance centres, including specialised centres, and educational resource centres in the implementation of national school education policies;
- support public in-service teacher training institutions, counselling and guidance

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<sup>180</sup> CPD Centres' tasks include primarily: diagnosing the educational needs of directors, pedagogical supervision staff and local government units in the field of education management; development and further education of educational management staff, teachers and employees of schools and institutions; implementation of educational tasks commissioned by Education Superintendent; cooperation with universities, associations, organizations, etc. in order to exchange experiences and implement joint projects; cooperation with educational centres in Poland; creating the basis for cooperation with the structures of the European Union, especially in the implementation of aid and educational programs supporting regional development; creating platforms for cooperation with Polish communities in neighbouring regions in the implementation of education reform and modern teaching methods (No source found).

<sup>181</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/continuing-professional-development-teachers-working-early>

<sup>182</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/continuing-professional-development-teachers-working-early>

centres, including specialised centres, educational resources centres and teachers-methodological advisers;

- establish collaboration and self-training networks and conduct other types of in-service training activities for school leaders, teachers-consultants and teachers-methodological advisers in public in-service teacher training institutions, and for school leaders and teachers in public counselling and guidance centres, including specialised centres, and educational resources centres;
- develop and disseminate information and methodological resources on the establishment of collaboration and self-training networks and other types of in-service training activities, for school leaders, teachers-consultants and teachers-methodological advisers in public in-service teacher training institutions, and for school leaders and teachers in public counselling and guidance centres, including specialised centres, and educational resources centres;
- support schools and other educational institutions in the performance of their tasks, including the development and publication of information and methodological resources;
- provide training to prospective experts of qualification and examination boards involved in professional promotion procedures for teachers

Teachers are obliged to improve their professional competences in line with the needs of the school and for professional advancement. The degree of improvement, based on observations of teacher work over

time, affects the appraisal of their work.

### Access to training

The national Centre for Education Development (Ośrodek Rozwoju Edukacji), supervised by the Minister of National Education, oversees the provision of CPD. The Centre plans and coordinates initial education and continuing professional development activities for all teachers. It trains staff for the counselling and career guidance system, including the areas of vocational and continuing education, and coordinates professional development activities for teachers working in schools for adults and continuing education institutions. In-service teacher training institutions are required to obtain accreditation, which confirms that an institution assures high quality of CPD activities for teachers. Accreditation is granted by the Head of the Regional Education Authorities in the province where the main premises of the applicant institution are located.<sup>183</sup>

Full-time teachers can access paid training leave as well as other benefits for their participation in compulsory training courses. Each year, the public body administering schools develops a CPD support plan in consultation with school directors to determine the amount of CPD funding and the types and subject areas of training to which funding will be allocated.<sup>184</sup>

School directors assess their CPD needs considering:<sup>185</sup>

- findings from pedagogical supervision;
- results of the primary school eighth-grad-

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<sup>183</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/continuing-professional-development-teachers-working-early>

<sup>184</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/continuing-professional-development-teachers-working-early>

<sup>185</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/continuing-professional-development-teachers-working-early>

er exam, vocational exams and / or the maturity exam as appropriate;

- tasks related to the implementation of the national core curriculum for general education or for vocational education;
- requirements for schools and other educational institutions;
- applications for CPD funding submitted by teachers.

### Recent changes and initiatives

Some of the key priorities of the state educational policy in the field of teacher training for 2023/2024 are:

- improving school leaders' and teachers' competences for intra-school evaluation;
- improving teachers' competences while working with students who have migrated to Poland, including teaching Polish as a foreign language;
- developing vocational education and workplace learning in partnership with industry representatives;
- supporting the development of teachers' digital skills, with particular emphasis on safe navigation and critical analysis of information available on the Internet (including methodologically correct use of tools and materials available on the Internet by teachers (e.g. avoiding plagiarism), in particular those based on artificial intelligence);
- developing teachers' skills using equipment purchased under the "Laboratory of the Future" program.

Changes in teacher professional advancement from September 1, 2022:

- Elimination of two levels of professional advancement: trainee teacher and contract teacher. After elimination of these

categories the system, rather than four levels of professional advancement in the system there will be: beginner teacher, appointed teacher, and certified teacher. Formally, the first level of advancement will be the rank of appointed teacher, for which a young teacher will be able to apply after 4 years of work. During this period – for 3 years and 9 months – the young teacher will not undertake an internship, but will participate in "professional preparation";

- Changes to the rules for establishing an employment relationship with a teacher. For the first two years, they will be employed under a fixed-term employment contract. Then (after working at the school for at least two years and obtaining at least a good performance evaluation) they will be employable and may have an employment contract for an indefinite period. A teacher who does not obtain the rank of appointed teacher within six years from the start of professional preparation will be employable under a fixed-term employment contract for one school year. Such an agreement may be concluded more than once. Employment based on appointment means automatic employment for an indefinite period.
- Professional advancement is linked with teacher performance evaluation.
- Teacher training - workshops in the new path of professional advancement and evaluation of teachers' work.

The regulation on detailed teacher qualification requirements, with the aim of adapting to adapt to new teacher education standards entered into force in October 2023.<sup>186</sup> This reform makes the requirements for teacher training more consistent with the requirements for teacher qualifications set out in the recent Regulation of the Minister

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<sup>186</sup> Regulation of the Minister of Education and Science of September 14, 2023 on detailed qualifications required from teachers (pap.pl)

of Education and Science on specific qualifications required of teachers. Under the new regulation postgraduate studies as

one of the requirements to become qualified for the profession.<sup>187</sup>

## Portugal

### Governance

The school system in Portugal is centralised. Portugal's Education Act ([Law No 46/86, 14 October](#) (subsequently amended by [Laws No 115/97, 19 September](#), [49/2005, 30 August](#), and [85/2009, 27 August](#)) covers the mainland and autonomous regions. The regional governments in the Autonomous Regions of the Azores and Madeira define national education policy and manage human, material and financial resources, through the respective Regional Secretariats for Education.<sup>188</sup>

The national Ministry of Education defines, coordinates, implements and evaluates national school education for pre-primary education, basic and upper secondary education, as well as out-of-school education and also aligns policy with vocational education training. The Ministry also manages the network of pre-school through upper secondary schools.

The Portuguese school network is comprised of clustered and non-clustered schools, with their own administration and management.<sup>189</sup> School clusters in Portugal are groups of schools which include several levels of education (pre-primary to upper

secondary) with autonomous management and administration. They may share a common pedagogical project, coordinate student pathways across school levels, set priorities to prevent early school leaving and promote inclusion; support teacher capacity building; share resources, and so on.<sup>190</sup> School clusters have some autonomy in terms of pedagogy, schedules, and non-teaching staff.

Recent reforms have increased autonomy of school clusters in regard to curriculum management, and have assigned more responsibilities to municipalities, including responsibilities for school building maintenance and management of non-teaching staff ([Decree-Law No 21/2019, 30 January](#)).<sup>191</sup>

### CPD provision

In Portugal, CPD is formally regulated by Decree-Law no. 22/2014<sup>192</sup> and focused on the priorities identified in schools and for individual teacher professional development of teachers. CPD is aimed at pre-school, primary and secondary schools.

Across the country (including autonomous

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<sup>187</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/national-reforms-school-education>

<sup>188</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/overview>

<sup>189</sup> Ibid.

<sup>190</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/glossary>

<sup>191</sup> <https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/administration-and-governance-local-and-or-institutional-level>

<sup>192</sup> See: <https://diariodarepublica.pt/dr/detalhe/decreto-lei/22-2014-570766>

regions) all teachers, including early childhood education professionals, are subject to the same statute, without any distinction, apart from the length of the weekly hours of direct work with children, which is higher in early childhood education (from zero to five years old) and in the first four years of basic education (from six to ten years old). CPD is mandatory and influences teacher appraisal and career progression. They must undergo training that complies with the regulations in Decree-Law no. 22/2014, with a minimum duration of 25 hours every two years. CPD is also regulated in the Basic Law of the Education System, approved by Law no. 46/1986, and in the Career Statute for Educators and Primary and Secondary School Teachers, approved by Decree-Law no. 139-A/1990.

At the national level, Decree Law No. 22/2014 defines the following as training entities:

- a. the School Association Training Centres (CFAE)
- b. higher education institutions
- c. training centres of non-profit professional or scientific associations
- d. the central services of the Ministry of Education and Science
- e. other public, private or cooperative, non-profit entities, accredited for this purpose.

There are various types of CPD: training courses, training workshops, study circles, short courses or, at the request of the Continuing Education Scientific-Pedagogical Council (CCPFC), internships and projects. The CCPFC has also the responsibility of giving accreditation to training providers,

as well as certifying CPD trainers (at the national level).<sup>193</sup> In the two autonomous regions of Portugal, Madeira and Azores, the respective Regional Education Directorates also certify regional entities.

### Access to training

Most CPD opportunities are offered locally, and everyone can access the offer via training providers' the websites. As there is no platform to publicise the training on offer at national level, schools and teachers find out about available training through the entities that promote it, namely through their official websites and the usual communication channels. Since there is a national body that certifies teacher training, information on its quality is always guaranteed. It should be noted that in the Autonomous Region of Madeira, the Regional Government's certifying and regulatory body provides a digital hub - INTERAGIR - which all training providers can use to advertise and manage training.<sup>194</sup>

Policymakers organize CPD initiatives when new reforms are implemented. Schools or groups of schools (school clusters) can also decide on training plans related to school improvement priorities, new pedagogical approaches, the use of technology, etc. School clusters are networks of schools with their own administration and management structure. The clusters include pre-school institutions as well as one or more teaching levels and cycles sharing a common pedagogical project. School clusters are under the supervision of the Ministry of Education, but they benefit from some level of autonomy (e.g. in pedagogy, management of teaching schedules, and non-teaching staff).<sup>195</sup>

<sup>193</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/continuing-professional-development-teachers-working-early>

<sup>194</sup> See: <https://digital.madeira.gov.pt/interagir>

<sup>195</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/overview>



One of the most active entities in promoting CPD are the School Association Training Centres (CFAE), under the Ministry of Education. Each CFAE has groups of internal trainers for education professionals in schools and provide training in areas identified as priorities by the schools themselves. The quality of training is monitored by the DGAE (Directorate-General for School Administration) and by external evaluations conducted by the [Inspectorate-General of Education](#) (Inspeção Geral da Educação - IGE).<sup>196</sup>

### Recent changes and initiatives

Recent changes in curricula are related to three linked reforms and initiatives which were formalised by Decree-Law n.º 55/2018, 6th July. They are:

National Programme for Promoting School Success (2016): <https://pnpsc.min-educ.pt>. The programme was created by the [Resolution of Council of Ministers No 23/2016](#), 23 March. The National Programme for Promoting School Success was launched in 2016 to improve school retention. It focused on the classroom, looking at issues such as co-operation among teachers and early interventions at the first sign of difficulty – such as frequently observed truancy. It also focused on the initial years of lower primary education, on years one and two as a preventive measure instead of a remedial work.<sup>197</sup>

Autonomy and Curricular Flexibility project (2017): <https://afc.dge.mec.pt>. In July 2017,

Portugal passed Decree No. 5908/2017, which allowed schools to join a project called the “Project for Autonomy and Curriculum Flexibility (PACF)” on a voluntary basis. PACF provided schools with the necessary conditions to manage the curriculum while also integrating practices that promote better learning.<sup>198</sup>

The Digital Transition Action Plan (2020): <https://digital.dge.mec.pt> (see below)

These changes in Portuguese schools and the renewal of the curriculum were also linked to the 2017 document “Conceptual Framework for the Students’ Profile by the End of Compulsory Schooling” (see Figure below). Its principles and values mirror the humanistic-based philosophy on which the whole document is based. By referring to students in the plural form, it fosters inclusion and values diversity viewing each student as a unique human being. Other recent curricular changes in Portugal include the introduction of competence-based education which are based on the eight key competences of the European Framework for Key Competences for lifelong learning.<sup>199 200</sup> As highlighted above, Portugal has also introduced [Decree-Law No 55/2018, 6 July), Ordinance No 306/2021, 17 December). This new ordinance consolidates curriculum flexibility and autonomy as well as initiatives to strengthen basic skills development in reading, mathematics and/or science [National Programme for Promoting School Success (2016)].

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<sup>196</sup> See: <https://eurydice.eacea.ec.europa.eu/national-education-systems/portugal/continuing-professional-development-teachers-working-early>

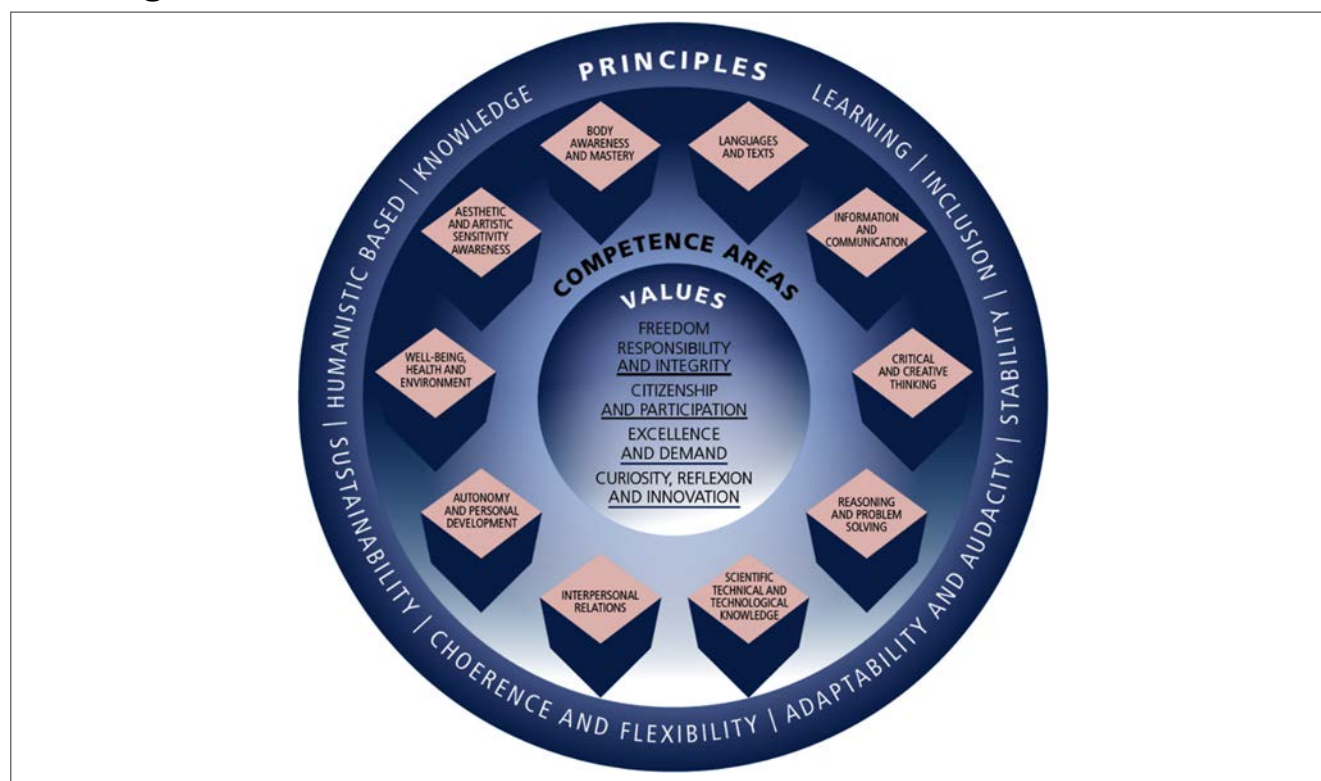
<sup>197</sup> [Curriculum-Flexibility-and-Autonomy-in-Portugal-an-OECD-Review.pdf](#)

<sup>198</sup> *ibid*

<sup>199</sup> Recommendations of the European Parliament and of the Council of 18 December 2006 on Key Competences for Lifelong Learning (2006/962/EC), Official Journal of the European Union, 30.12.2006.

<sup>200</sup> Council of the European Union, Council Recommendation of 22 May 2018 on “Key Competences for Lifelong Learning”, OJ C 189, 4.6.2018.

**Figure 4: Conceptual Framework for the Students' Profile by the End of Compulsory Schooling**



Source: DGE, Students' Profile by the End of Compulsory Schooling <https://cidadania.dge.mec.pt/sites/default/files/pdfs/students-profile.pdf>

Other recent initiatives address learner inclusion. The legal framework of inclusive education (Decree-law No 54/2018, 6 July, amended by Law No 116/2019, 13 September) places emphasis on supporting diverse learning needs and introduces differentiated or specialised tracks for learners. Portugal has indicated initiatives focusing on specific target groups (e.g. migrant, Roma, and special education needs (SEN) learners. Other measures include integration of learners with SEN learners into mainstream schooling and establishment of zones of education priority established targeting schools with low performance/high levels of illiteracy/high share of migrant students.

### Digital Transition Plan 2021-2027

Based on studies of the Digital Competence Framework for Educators (DigCompEdu) and Digitally Competent Education Organisations (DigCompOrg), and within the

framework of the Digital Education Action Plan (2021-2027), Portugal developed a large-scale plan for the Digital Development of Schools. This Action Plan for the Digital Development of Schools (PADDE) was therefore established, and its areas of intervention will focus on different school organisation in digital technologies: professional involvement, teaching and learning, assessment of learning, continuous professional development and leadership.

As a first step, Portuguese teachers widely responded (92%) to a '*Selfie for Schools*' check-in questionnaire (a self-reflection tool developed by The Joint Research Centre of the European Commission), a key starting point to determine the type of training teachers would attend. This tool <https://education.ec.europa.eu/selfie> helped create a digital portrait to then prepare the "School Digital Plan". To face the ongoing digital transformation, schools are prioritising the

integration of digital technologies into their routines. To this end, based on an internal reflection, involving the various stakeholders, schools considered different dimensions and defined their own global digital development strategy, building and implementing their Digital Development Action Plan, based on 3 dimensions:

- Organisational: leadership; collaborative work; professional development of the school's human resources;
- Pedagogical: curriculum development and assessment; pedagogical practices; use of digital educational resources;
- Technological and digital: improving the quality of the Internet in schools, providing each student and teacher with equipment and Internet access, availability of digital platforms and digital educational resources.

## **Selfie for Schools**

Schools successfully used the “Selfie for Schools”, with over 8000 training classes and 3300 other digital training activities held between 2020 and 2023 following data from Selfie for Teachers. This was part of the action plan to help schools identify where they are now and where they intend to be.

Policy makers finance (either via UE funds or internal resources) the training necessary for educators and teachers to progress in their careers, as it is mandatory that this be free. There is currently a large investment in digital training in Portugal. However, some schools and associations organise trainings that teachers must pay to attend.

# Annex 2: Standards for teacher educators working in initial teacher education

## US (Association of Teacher Educators)

### Standard 1 – Teaching

Model teaching that demonstrates content and professional knowledge, skills, and dispositions reflecting research, proficiency with technology and assessment, and accepted best practices in teacher education.

#### Indicators:

- Model effective instruction to meet the needs of diverse learners
- Demonstrate and promote critical thinking and problem solving among teacher educators, teachers, and/or prospective teachers
- Revise courses to incorporate current research and/or best practices
- Model reflective practice to foster student reflection
- Demonstrate appropriate subject matter content
- Demonstrate appropriate and accurate professional content in the teaching field
- Demonstrate a variety of instructional and assessment methods including use of technology
- Mentor novice teachers and/or teacher educators
- Facilitate professional development experiences related to effective teaching practices
- Ground practice in current policy and research related to education and teacher education

#### Artifacts

- Evaluations from supervisors, colleagues, students, or others
- Course syllabi
- Video and/or audiotapes of teaching
- Developed instructional materials (e.g., lessons, units, courses of study, presentations)
- Testimonials
- Teaching awards and/or other forms of recognition
- Logs or other documentation of classroom activities
- Journals of reflective practice
- Philosophical statement that reflects underlying knowledge and values of teacher education
- Relevant credentials (e.g., certificates, licenses)
- Evidence of technology-based teaching and learning

<sup>201</sup> Standards for Master Teacher Educators of the Association of Teacher Educators. Available at: [ate\\_teacher\\_educators\\_standards\\_1-14-24.pdf \(ate1.org\)](https://www.ate1.org/standards_1-14-24.pdf).

## Standard 2 – Cultural Competence

Apply cultural competence and promote social justice in teacher education.

### Indicators

- Exhibit practices that enhance both an understanding of diversity and instruction that meets the needs of society
- Engage in culturally responsive pedagogy
- Professionally participate in diverse communities
- Model ways to reduce prejudice for pre-service and in-service teachers and/or other educational professionals
- Engage in activities that promote social justice
- Demonstrate connecting instruction to students' families, cultures, and communities
- Model how to identify and design instruction appropriate to students' stages of development, learning styles, linguistic skills, strengths and needs
- Foster a positive regard for individual students and their families regardless of differences such as culture, religion, gender, native language, sexual orientation, and varying abilities
- Demonstrate knowledge of their own culture and aspects common to all cultures and foster such knowledge in others
- Promote inquiry into cultures and differences
- Teach a variety of assessment tools that meet the needs of diverse learners
- Recruit diverse teachers and teacher educators

### Artifacts

- Course syllabi
- Instructional materials
- Evidence of involvement in schools and other organizations with diverse populations
- Video and/or audio tapes of teaching

- Course assignments
- Student work samples
- Evidence of involvement in school based projects and/or service learning
- Evidence of providing professional development to others at all levels
- Philosophical statement that reflects underlying that reflects attention to diversity
- Assessment tools appropriate for use with diverse learners

## Standard 3 – Scholarship

Engage in inquiry and contribute to scholarship that expands the knowledge base related to teacher education.

### Indicators

- Investigate theoretical and practical problems in teaching, learning, and/or teacher education
- Pursue new knowledge in relation to teaching, learning, and/or teacher education
- Connect new knowledge to existing contexts and perspectives
- Engage in research and development projects
- Apply research to teaching practice and/or program or curriculum development
- Conduct program evaluation
- Acquire research-based and service-based grants
- Disseminate research findings to the broader teacher education community
- Engage in action research
- Systematically assess learning goals and outcomes

### Artifacts

- Publications
- Presentations at meetings of learned societies or specialized professional associations
- Citations by other scholars



- Professional development workshops and/or seminars
- Speaking engagements that focus on issues of teacher education
- Evidence of improved teaching practice
- Evidence of increased student learning
- Research-based program development
- Funded grant proposals
- Research awards or recognitions
- National Board Certification

## **Standard 4 – Professional Development**

Inquire systematically into, reflect on, and improve their own practice and demonstrate commitment to continuous professional development.

### **Indicators**

- Systematically reflect on own practice and learning
- Engage in purposeful professional development focused on professional learning goals
- Develop and maintain a philosophy of teaching and learning that is continuously reviewed based on a deepening understanding of research and practice
- Participate in and reflect on learning activities in professional associations and learned societies
- Apply life experiences to teaching and learning

### **Artifacts**

- Statement of philosophy of teaching and learning
- Evidence of professional development goals and activities
- Self-assessment
- Evidence of documented professional growth
- Evidence of participation in professional development experiences
- Letter of support

- Reflective journals

## **Standard 5 – Program Development**

Provide leadership in developing, implementing, and evaluating teacher education programs that are rigorous, relevant, and grounded in theory, research, and best practice.

### **Indicators**

- Design, develop, or modify teacher education programs based on theory, research, and best practice
- Provide leadership in obtaining approval or accreditation for new or modified teacher education programs
- Lead or actively contribute to the ongoing assessment of teacher education courses or programs
- Provide leadership that focuses on establishing standards for teacher education programs or on developing, approving, and accrediting teacher education programs at the local, state, national, or international level
- Contribute to research that focuses on effective teacher education programs

### **Artifacts**

- Course or program proposal
- Revision to course or program
- New materials developed to meet course or program requirements
- Evidence of participation in program development, revision, or evaluation
- Document of leadership in program accreditation process (state or national)
- Program recognition or award
- Evidence of participation in research on or evaluation study of a teacher education program
- Publications, handouts, or other documentation of conference presentations on program development

## Standard 6 – Collaboration

Collaborate regularly and in significant ways with relevant stakeholders to improve teaching, research, and student learning.

### Indicators

- Engage in cross-institutional and cross-college partnerships
- Support teacher education in the P-12 school environment
- Participate in joint decision making about teacher education
- Foster cross-disciplinary endeavours
- Engage in reciprocal relationships in teacher education
- Initiate collaborative projects that contribute to improved teacher education
- Acquire financial support for teacher education innovation to support collaboration

### Artifacts

- Evidence of collaborative activities (e.g., minutes and agenda of meetings)
- Testimonials
- Records of awards, recognition, and financial support for research resulting from collaboration
- Course syllabi that demonstrate collaboration
- Joint publications resulting from collaboration

## Standard 7 – Public Advocacy

Serve as informed, constructive advocates for high quality education for all students

### Indicators

- Promote quality education for all learners through community forums, activities with other professionals, and work with local policy makers
- Inform and educate those involved in making governmental policies and regulations

at local, state, and/or national levels to support and improve teaching and learning

- Actively address policy issues which affect the education profession

### Artifacts

- Evidence of advocacy for high quality teaching and learning in local, state, national, and/or international settings
- Evidence of contributions to educational policy or regulations at local, state, national, and/or international levels
- Papers, presentations, and/or media events designed to enhance the public's understanding of teaching and learning
- Evidence of service to school accreditation committees
- Scholarship and/or grant activity promoting education

## Standard 8 – Teacher Education Profession

Contribute to improving the teacher education profession.

### Indicators

- Actively participate in professional organizations at the local, state, national, or international level
- Edit/review manuscripts for publication or presentation for teacher education organizations
- Review resources designed to advance the profession
- Develop textbook or multimedia resource for use in teacher education
- Recruit promising pre-service teachers
- Recruit future teacher educators
- Mentor colleagues toward professional excellence
- Design and/or implement pre-service and induction programs for teachers
- Support student organizations to advance teacher education

- Advocate for high quality teacher education standards

### Artifacts

- Evidence of active participation in professional organizations
- Conference programs and proceedings
- Books/monographs/periodicals edited or reviewed
- Textbook/multimedia reviews
- Textbooks and multimedia resources developed
- Testimonials
- Evidence of support of student organizations
- Grant proposals
- Reports and evaluations of projects/advancement programs
- Records of awards/recognition for excellence in teacher education

## Standard 9 – Vision

Contribute to creating visions for teaching, learning, and teacher education that take into account such issues as technology, systemic thinking, and world views.

### Indicators

- Actively participate in learning communities that focus
- on educational change
- Demonstrate innovation in the field of teacher education
- Demonstrate qualities of an early adopter of technology and new configurations of learning
- Actively pursue new knowledge of global issues
- Support innovation adoption with research
- Relate new knowledge about global issues to own practice and K-12 classroom teaching

## Belgium (The flemish teacher educator development profile)

### Profile 1 – The fundamentals of being a teacher educator

Mastery: teacher educators have mastered the skills of the teacher to a greater extent.

- Awareness: teacher educators are aware of the choices that they and other people make and can clearly state what the ideas, conceptions, beliefs, research on which these choices are based are. Teacher educators can explain clearly why they make particular choices: this is part of the core business of their professional activity.
- Technical repertoire: teacher educators possess a bigger technical repertoire and can draw on this in order to come up

with alternative ways of approaching situations for use in their own professional practice and that of other people.

- Background knowledge: teacher educators have a broad background knowledge of general and subject-related didactics, pedagogy, supervision, etc., and can draw on this for their own professional practice and that of other people.
- Communication: teacher educators are highly proficient in oral and written communication. They can quickly identify the strengths and weaknesses of teaching situations.
- Congruence: For a teacher educator the objective and the medium are the same: teaching is not just a medium to open up

and to convey a particular content, but it is also the content itself. This places considerable demands on the teacher educator's professional practice and his or her capacity for reflection. There cannot be any contradiction between the explicit and implicit messages.

- Helicopter perspective: teacher educators must be able to think critically about the place of education in the society.

## **Profile 2 – The teacher educator as a supervisor of learning and development processes**

The TE has knowledge and understanding of...

- learning theories and their significance for the supervision of FETs
- different visions of teacher education and the supervision of FETs
- the historical and social background of learning theories and visions of teacher education
- learning processes in adults, pupils and FETs
- the diversity in the initial situation of FETs regarding their personal and professional development
- the most common professional impediments among FETs
- the development phases that students go through on their way to becoming teachers
- methods for making sure that FETs learn both in and from practice situations
- different sorts of feedback and the necessary pre-conditions for achieving effective feedback
- a varied repertoire of methods that stimulate FETs' learning
- a variety of sources with theoretical and practical material for teacher education and the supervision of FETs

- a variety of conceptions of reflection and the pre-conditions for an effective reflection process
- methods for documenting and assessing the development of FETs 2.2 The TE is able to...
- explain and defend his or her own vision of the professional development of teachers
- explain the theoretical aspects of learning processes in pupils and FETs
- can adapt his or her supervision to the personal situation and needs of FETs
- can achieve differentiation in the practice supervision of FETs, thanks to his or her broad repertoire of supervision methods for learning and development processes
- encourage FETs to reflect on their own personal and professional capabilities and needs
- encourage FETs to assume self-direction of their own learning process
- evaluate and discuss the progress and results of FETs THE FLEMISH TEACHER EDUCATOR DEVELOPMENT PROFILE 10 2.3 The TE...
- has an appropriate self-image
- is prepared to reflect on his or her own learning, teaching and supervision styles and to adapt these to the needs of FETs
- sees the mistakes or shortcomings of FETs as a learning opportunity, in the first instance

## **Profile 3 – The teacher educator as a supporter and supervisor of personal, social and interactive processes**

The TE has knowledge and understanding of...

- discussion and coaching techniques
- the theory of adult education and group dynamics
- a variety of instruments and methods for self-evaluation 3.2 The TE is able to...

- create a safe atmosphere for working and studying in a group of FETs by initiating and supervising group dynamic processes and by stimulating interaction between him/herself and FETs and among the FETs themselves.
  - adapt his or her supervision method to the development phase that the individual FET has reached and to the questions, needs, problems and learning questions of the FET
  - show empathy, acceptance and genuineness to the beginning teacher
  - cope with conflicts and problem situations that arise in his/her relationship with the FET in a professional way
  - use instruments for the assessment and self-assessment of professional expertise (and where necessary develop these him/herself)
  - encourage FETs to reflect on their experiences, to assume self-responsibility for their learning process and to engage in self-assessment of their professional development
  - assess the suitability of FETs using the relevant criteria
- 3.3 The TE...
- has a strong capacity to empathize: he or she sees what the needs, capabilities, emotions, limits and ambitions of FETs are
  - shows respect
  - has faith in the talents of FETs and their capacity to develop further
- a variety of discussion formats (and the pre-conditions that need to be met) for the discussion of teaching situations
  - the development, implementation and evaluation of teacher education programs
- 4.2 The TE is able to...
- translate new developments in education and in their own area of expertise to their teacher education practice
  - renew and develop their own didactic repertoire
  - provide teacher education based on their own conceptions about good teaching and explicitly explained
  - describe, explain and justify didactic choices in teacher education
  - reflect on didactic choices with FETs and challenge them to make their own choices
  - use the experiences of FETs, deepen these experiences and link these to educational theories and thus encourage FETs to draw general conclusions from these experiences
  - assist the FETs in the planning, execution and evaluation of lessons
  - use a variety of techniques in observing, analysing and discussing teaching situations
  - analyse, assess and discuss teaching situations with FETs based on his or her subject didactic insights
  - provide alternatives and encourage FETs to reflect on their own performance and approach and the underlying conceptions, values and standards, when discussing teaching situations
- 4.3 The TE...
- is aware of his or her own conceptions about what constitutes good teaching and good teacher education and is prepared to explain these explicitly to FETs and to his or her fellow teacher educators
  - is prepared to actively seek input for the renewal of his or her own didactic repertoire and is prepared to 'look over the wall' to do so.

#### **Profile 4 – The teacher educator as a teacher education specialist (an expert in teacher education didactics)**

The TE has knowledge and understanding of...

- the social and historical context which influences conceptions about teacher education and its structures
- the teaching and supervision of pupils in the various school subjects



### **Profile 5 - The teacher educator as a content expert**

The TE has knowledge and understanding of...

- the current structure of education in Flanders
- the legislative framework for teacher education degree courses in Flanders
- the professional profile and basic teacher competencies (relating to the level for which he or she is training FETs)
- the professional profile of teacher educators
- the development targets and final attainment levels of the educational level for which he or she is training FETs
- the contents of the subject or discipline in which he or she is training FETs
- recent developments relating to contents and skills in his or her own field of study or discipline(s), subject didactics and teacher education didactics

### **Profile 6 – The teacher educator as an organizer**

The TE has knowledge and understanding of...

- the logistical and organisational pre-conditions for good teaching and teacher education
- the policy implementation capacity of schools and teacher education programs
- the procedures and agreements within his or her own organisation and the organisations with which he or she frequently cooperates
- efficient meeting techniques and decision-making procedures 6.2 The TE is able to...
- organize his or her own work and time effectively

- improvise when necessary
- carry out the administrative tasks assigned to him or her properly
- analyse and explain explicitly the logistical and organisational aspects of teaching situations 6.3 The TE...
- is aware of the his or her own strengths and weaknesses in terms of organisation

### **Profile 7 – The teacher educator as an innovator and researcher**

The TE has knowledge and understanding of...

- the results of recent educational research relating to learning, teaching and teacher education of FETs
- how educational research (both theoretical and practical) is carried out and how results are arrived at
- the determining factors relating to the implement of educational innovations 13 THE FLEMISH TEACHER EDUCATOR DEVELOPMENT PROFILE 7.2 The TE is able to...
- integrate the results of recent educational research into the teacher education of FETs and in the implementation and design of the curriculum
- renew his or own teaching practice on the basis of additional training, his or her own experience and creativity
- carry out research or make an academic contribution relating to topics relating to education, learning and/or teacher education
- supervise FETs in developing a research-oriented attitude and in the execution of practice-oriented research
- set up, execute and evaluate a research project (action research) with FETs 7.3 The TE...
- has an experimental, research-orientated, evaluative and cooperative approach

to the teaching profession and being a teacher educator

### **Profile 8 – The teacher educator as a member of a teacher education team**

The TE has knowledge and understanding of...

- a variety of formats for collegial learning
  - basic organisation theory
  - the micro-political and socialisation processes in organisations
  - the influence of the hidden curriculum on their own teacher education
  - effective communication within their own school organisation
  - collaborative processes within the organisation and their own role in these
- 8.2 The TE is able to...
- relate his or her own vision of education to that of his or her colleagues and the organisation and communicate this
  - examine the culture of his or her own teacher education institution and the teacher education concepts it applies in a constructively critical manner
  - contribute, within his or her own organization, to policy and vision development and policy implementation inter alia by working with colleagues on the development, preparation, implementation and modification/innovation of teacher education
  - participate constructively and effectively in a variety of consultative bodies and collaborative structures within his or her own organisation
- 8.3 The TE...
- is prepared to work with teaching colleagues to supervise the professional development of FETs.
  - is prepared to share the results of his or her own work with colleagues
  - is prepared to ask advice from colleagues about a variety of topics regarding learning, teaching and teacher education

- regards the induction supervision of new colleagues as a responsibility of the entire teacher education team and is prepared to help beginning colleagues settle into their duties, teacher education and school culture
  - regards a good atmosphere within the teacher education team as an important pre-condition for the well-being and learning of all involved
- THE FLEMISH TEACHER EDUCATOR DEVELOPMENT PROFILE 14
- is open to consultation and collaboration with all the members of the teacher education community
  - adopts a critical attitude with regard to the culture (explicit and implicit rules) of the organisation and is prepared to reflect on his or her own part and his or her own responsibility in this
  - is a loyal team member

### **Profile 9 – The teacher educator as a partner for external stakeholders and as a member of the educational community**

The TE has knowledge and understanding of...

- the broad educational field
  - the functioning of relevant knowledge networks
  - the significance of the policy implementation capacity of school organisations
  - developments in the wider educational field: regional, national and international
- 9.2 The TE is able to...
- work together with representatives of schools, universities, policy-making bodies, professional organisations and other groups with a view to improving learning, teaching and teacher education in a regular and meaningful manner
  - take part in the social debate about educational topics

- make a contribution to the implementation or discussion of educational innovation and teacher education
  - make a contribution to the knowledge production about teacher education and teaching
  - reflect on the teaching profession, the TE and their place in society
  - build and maintain a regional, national or international network that is relevant for the performance of his or her duties 9.3 The TE...
  - is a well informed and constructively critical advocate of good quality teaching for all pupils and future teachers
  - takes a critical look at the mechanisms within school organisations which might constitute obstacles to a continued evolution towards a more humane and just society
  - is sufficiently micro-politically literate to 'read' the context of his or her own organisation and to take action based on this
  - is prepared to provide an explicit and substantiated explanation of his or her own standpoint with regard to topics of educational policy
  - human rights and the rights of the child
  - the various types of education (environmental, peace, human rights, global, ...)
- 10.2 The TE is able to ...
- reflect on new social developments and their possible impact on the teacher education of FETs
  - supervise FETs in arriving at an understanding of the influence which social, cultural and historical factors have on education
  - explain the relationship between current or existing topics in a variety of social sectors and educational practice
  - adopt a critical approach with regard to the media 10.3 The TE ...
  - is prepared to follow current affairs critically
  - has an eye for interesting and relevant developments in a variety of social sectors
  - supports the emancipation of children, teenagers and adults
  - sets a good example in the area of cultural participation

## **Profile 10 – The teacher educator as an involved and critical social participant**

The TE has knowledge and understanding of ...

- the relationship between education and other social sectors
- the democratic and emancipatory contribution which FETs and TEs can make as part of the fight against injustice and discrimination in education and in society at large
- current affairs
- the administrative organisation of contemporary society and how it has evolved into its present form

## **1. Fundamentals of the work of teacher educators**

The teacher educator:

- works simultaneously on the following three levels:
  1. understands the development of pupils
  2. facilitates and supervises the student teacher's development
  3. is able to steer his or her own professional development Focuses on the development of the participants. The teacher educator stimulates the participants to take responsibility for their own development and values the contribution of the participants a role model for (prospective) teachers

## **2.interpersonal: creates a safe (working) atmosphere;**

The teacher educator:

- creates a safe working atmosphere
- supports the development of the professional identity of the participants
- Stimulates the development of values of the participants and is conscious of his or her own values

## **3. pedagogical: creates for student teachers an inspiring and stimulating learning environment;**

The teacher educator:

- Creates and inspiring and stimulating learning environment
- Acknowledges differences between participants and if necessary is able to act upon them

## **4.organisational: improvises if necessary;**

The teacher educator:

- organises his or her work and private time well. S/he improvises when necessary

## **5. working with colleagues in the organisation: actively contributes towards the development and implementation of the organisation's outlook and policy;**

The teacher educator:

- makes his or her educational views and concepts explicit, is able to relate them to the views and concepts of colleagues and the institute and is able to discuss these

## **6. working in a wider context: has a relevant network and keeps it up-to-date;**

The teacher educator:

- has a relevant (inter)national network

## **7. working on your own development: reflects systematically on their own pedagogical approach and (teaching) behaviour towards students, colleagues and others.**

The teacher educator :

- reflects systematically on his or her own pedagogical approach and (teaching) behaviour towards students, colleagues and others

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<sup>202</sup> Teacher education in the Netherlands balancing between autonomous institutions and a steering government, Snoek, Marco, 2011. Available at: [Microsoft Word - prelom\\_European dimensions.doc \(hva.nl\)](#),

## Israel (MOFET Institute)

The Ministry of Education has a funded system of professional development for teacher educators through the unique MOFET Institute. This is an independent,

non-profit foundation that provides a national forum for the exchange of information and ideas, research, advanced study, and professionalisation in teacher education.

MOFET provides a wide range of learning opportunities to support teacher educator induction and professional development. Professional development opportunities include 'professional specialisation' courses in the following areas listed in the columns to the right.

While there are no explicitly stated professional standards for teacher educators in Israel, some MOFET initiatives have addressed the applicability of the Association of Teacher Education (ATE) Standards from the USA (listed above) for the work of teacher educators in Israel.<sup>203</sup>

### Pedagogy and Instruction

### Teacher Educators as Researchers

### Information and Communication Technologies

### Evaluation and Measurement

## Netherlands

The Dutch standard for teacher educators consists of different elements of competence. In the quotation shown below, five examples of the standard are cited in relation to the element of competence for which they 'stand':

- Works together with others in multi-disciplinary teams (knowledge)
- Models excellent teaching/practises what he/she preaches (skill)
- Is focused on the development of participants (attitude)
- Is open to others (value)
- Is dedicated, committed and involved (personal characteristic)

The development process of the original standard started with a working conference held in November 1997. Two documents were discussed: the standard for Dutch teachers and the standard for Master Teacher Educators (Association of Teacher Educators 1996). The plenary and working group discussions resulted in some general ideas about the content of a standard for Dutch teacher educators. In 1998 a development group of 20 teacher educators (from different types of teacher education institutions and backgrounds) wrote the content of the standard. This first draft was then discussed during another working conference in January 1999, and the first public version was published in the middle of 1999. This was

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<sup>203</sup> Understanding Teacher Educators' Work and Identities, Anja Swennen et al, 2009, Amsterdam University. Retrieved from: [\(PDF\) Becoming a Teacher Educator: Theory and Practice for Teacher Educators \(researchgate.net\)](#),



sent to every teacher educator in the Netherlands. Using the working conferences and the development group, the standard was thus developed by the teacher educators themselves. The same procedures were followed in 2003 to develop the second version of the standard. To serve the goals of quality assurance and professional development the standard itself was not enough.

An extra instrument was needed, and for that reason, in 2000, as part of the Dutch project 'Professional Quality of Teacher Educators', the procedure of (self-) assessment, professional development and registration (**SPR**) was developed. After successfully completing this procedure, participants are registered by the Association of Dutch Teacher Educators as certified teacher educators. The professional standard combined with this procedure is what Ingvarson (1998) calls 'a standards-based professional development system'. Within this procedure the standard is used as a reference point by teacher educators. Participants in **SPR** are asked:

1. to analyse their strengths and weaknesses by using a structured standard based score form and describe authentic situations, which demonstrate good practice examples from their own work; 138 B. Koster and J.J. Dengerink

2. to discuss these products with a peer coach, who is also a participant in the procedure;
3. to assemble feedback from colleagues and student teachers by giving them a structured standard-based score form to be filled in by at least 30 students and five colleagues;
4. to formulate goals and develop a plan for professional development;
5. to discuss their products and professional development plan with two peer assessors;
6. to construct a portfolio containing a description of how they worked on their professional development and about the outcomes of their professional development;
7. to have a final assessment in a meeting with the peer assessors

(Professional standards for teacher educators: How to deal with complexity, ownership and function. Experiences from the Netherlands-[Professional standards for teacher educators: how to deal with complexity, ownership and function](#), May 2008, European Journal of Teacher Education, *B. Koster and J. Dengerink*)

## Israel

Teacher education in Israel takes place in the universities (for teachers intending to teach in high schools) and in the teachers' colleges (mainly for teachers in primary and junior high schools). The 26 academic teacher colleges act as independent academic institutions, and award their grad-

uates a first degree in education (B.Ed.) and a teaching qualification. Some of the teachers' colleges also award second degrees in teaching (M.Ed.) for serving teachers. Pre-service students are usually aged between 19 and 25. They follow a four-year course, including an induction into teaching

in the final year. The teacher colleges also run courses for training graduates to become qualified teachers.

Recent changes in teacher education have been twofold. Firstly, three years ago the government which finances and inspects teacher education, decided to reduce the number of colleges, and to transfer the budget from the Ministry of Education to the Council for Higher Education. It also decided to create new structures for pre-service programmes. These changes are still in process and it is anticipated that it will take many years for them to be fully implemented. Secondly, the training which students receive in schools during fieldwork (teaching practices) has become more important and various models of partnership have been developed, including Professional Development Schools. School-based mentors are now considered almost as integral to the teacher education system as higher education-based educators. These changes are impacting on the colleges and on individual teacher educators in various ways. Brief examples include the following: some of the small colleges are in the process of merging together to create larger institutions and one of the teachers' college has merged with a regional college; teacher educators are working on changing the pre-service curriculum, following the model suggested by the Council for Higher Education; and eleven colleges are cooperating in a nation-wide network looking at the issue of school-college partnership in teacher education and have just published a book presenting the different models.

On entry to higher education most teacher educators have at least a Masters degree, but since the teacher colleges have started to run M.Ed courses working teacher educators and new entrants are required to hold a PhD. Teacher educators are not

necessarily required to have practical experience of teaching or to hold a school teaching qualification.

In many ways teacher educators' work is similar to that of other academic staff in that they teach and research, including publishing papers and books and presenting at conferences. But for many teacher educators the quality of their teaching and the ways in which it results in developing students as reflective teachers is of particular importance. Discourses of reflective practice are central to the ways

in which working in schools and teacher education are understood. For example, teacher educators emphasise the importance of reflection on experiential learning in learning to teach. They also stress that beginning teachers need to be responsive to local educational contexts, bringing flexibility and open-mindedness to their work. Within the teacher education colleges it is widely understood that teacher educators must act as a community of professionals, engaging in lifelong learning (Ben-Peretz & Silberstein, 2001).

Developing pedagogies for high quality teacher education has been one definite focus of the professional group – and of MOFET (see below) – in recent years. A further focus has been developing effective modes of assessment for student teachers' professional and personal development. Not all teacher educators work as supervisors of students' fieldwork in schools. Those who do are likely to have

personal experience of working in schools before entering higher education. This sub-group of teacher educators has taken the lead in developing ways of working in partnerships with school-based mentors. Teacher educators, alongside those men-

tors, take responsibility for recruiting, educating and assessing a high-quality school teaching force.

In recent years there has been a distinct shift in the ways in which teacher educators understand their work, broadly this shift can be conceptualised as being from a practice orientation to an academic and disciplinary orientation. Research engagement is important for most teacher educators, some of this work focuses on the pedagogies of teacher education and student learning patterns. Three examples of

relevant research by teacher educators are Smith's research on teacher educators' expertise (Smith, 2005), Arnon and Reichel's work on the ideal teacher (Arnon & Reichel, 2007), and Eldar and Talmor's study of the characteristics of outstanding student teachers (Eldar & Talmor, 2006).

(Becoming a Teacher Educator: Theory and Practice for Teacher Educators – January 2009, Springer, Anja Swennen et al, [Becoming a Teacher Educator: Theory and Practice for Teacher Educators \(researchgate.net\)](#))

## Belgium

The professional profile is also built on an overall picture of 'the teacher educator'. Apart from basing our profile on other professional standards and research into the application and formulation of knowledge, skills and attitudes we have also included the questions: 'what are teacher educators actually?' and 'what makes teacher educators different from other teachers?' The most important characteristics of teacher educators are as follows:

- **Mastery:** teacher educators have mastered the skills of the teacher to a greater extent.
- **Awareness:** teacher educators are aware of the choices that they and other people make and can clearly state what the ideas, conceptions, beliefs, research on which these choices are based are. Teacher educators can explain clearly why they make particular choices: this is part of the core business of their professional activity.
- **Technical repertoire:** teacher educators possess a bigger technical repertoire and can draw on this to come up with alternative ways of approaching situations for use in their own professional practice and

that of other people.

- **Background knowledge:** teacher educators have a broad background knowledge of general and subject-related didactics, pedagogy, supervision, etc., and can draw on this for their own professional practice and that of other people.
- **Communication:** teacher educators are highly proficient in oral and written communication. They can quickly identify the strengths and weaknesses of teaching situations.
- **Congruence:** for a teacher educator the objective and the medium are the same: teaching is not just a medium to open up and to convey a particular content, but it is also the content itself. This places considerable demands on the teacher educator's professional practice and his or her capacity for reflection. There cannot be any contradiction between the explicit and implicit messages.
- **Helicopter perspective:** teacher educators must be able to think critically about the place of education in the society. The development profile set out below has six characteristics.
- It relates to all types of teacher educators

on the staff of a teacher education institution.

- The profile must be flexible: it has to be capable, at particular moments, of being adapted to changes in society and developments in the profession and must lend itself to being used by teams and be capable of being adapted to meet their own purposes.
- The profile is not intended as a selection instrument, but as a developmental instrument: teacher education degree courses can use it when mapping out collective and individual professional development routes.
- The profile is a starting point for self-evaluation, feedback by peers.
- The conception of the profile is broad and deep. No one can fulfil this ideal type. Many of these competencies will only be acquired by a teacher educator in the course of his or her teaching career.

It is completely unreasonable to expect would-be teacher educators to meet all the criteria included in this list at the start. Becoming a teacher educator is a learning process and for that reason continuous professional development is an absolute requirement for teacher educators.

- The profile has to be a tool that individual teacher educators or teams of teacher educators can apply to their professional development, one that provides them with a language in which to talk about that professional development and which gives them direction. With this in mind, in the final section of this booklet we have provided several methods that can be used in order to put this profile into practice.

THE FLEMISH TEACHER EDUCATOR DEVELOPMENT PROFILE [velov\\_bro\\_en\\_111206.pdf \(wordpress.com\)](https://www.velov.be/en_111206.pdf)

## USA

The standards are intended for all personnel who are responsible for teacher education from pre-service teacher preparation to programs that support the continued education of teachers from initial employment through later years of their career. The Standards were first developed in 1992 and were recently revised through extensive review of research on teacher education, input from teacher educators, and input from public review.

1. In order for teacher educators to impact the profession, they must successfully model appropriate behaviours in order for those behaviours to be observed, adjusted, replicated, internalized, and applied appropriately to learners of all levels and styles.
2. One of the charges to teacher education is to prepare teachers to connect and communicate with diverse learners (Darling-Hammond & Bransford, 2005). To develop capacity among culturally, socially, and linguistically diverse students, teachers first need to know their own cultures.
3. The scholarship of an accomplished teacher educator is conceptualized through Boyer's model of scholarship (1997) which includes four foci: discovery, integration, application, and teaching.
4. Accomplished teacher educators help pre-service and in-service teachers with professional development and reflection, and model examples from their per-

sonal development, making transparent the goals, information, and changes for improvements in their own teaching.

5. The foundation of the professional work of teacher educators lies in development and maintenance of quality programs that prepare beginning teachers and provide for teachers' on-going professional development during and after induction into the profession.
6. Accomplished teacher educators adopt a collaborative approach to teacher education that involves a variety of stakeholders (e.g., universities, schools, families, communities, foundations, businesses, and museums) in teaching and learning.
7. Teacher educators advocate both within and outside of the profession for high quality education for all students at all levels
8. Through a visionary and collaborative approach, accomplished teacher educators accept responsibility for improving their profession.
9. Accomplished teacher educators develop essential insights into the vast changes occurring today.
10. Standards for Master Teacher Educators of the Association of Teacher Educators [ate\\_teacher\\_educators\\_standards\\_1-14-24.pdf \(ate1.org\)](https://www.ate1.org/standards_1-14-24.pdf)





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