

PORTUGAL

ECEC Workforce Profile

Country report author

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1. ECEC governance

In Portugal, the ECEC system comprises two main sectors: provision for children up to the age of 3, encompassing infant-toddler centres (*creches*) and childminders/nannies (*amas*)¹, and centre-based pre-primary provision for children from 3 years up to primary school age (6 years) (*estabelecimentos de educação pré-escolar* or *jardins de infância*).

Governance is characterised by a split system: the 0-3 sector (both centre-based and home-based) is governed by the Ministry of Work, Solidarity and Social Security (MWSSS) (*Ministério do Trabalho, Solidariedade e Segurança Social*) and the 3-6 sector is governed by the Ministry of Education (ME) (*Ministério da Educação*). The pre-primary sector (3-6) is part of the Portuguese education system as defined by the Education Act (Law 46/86, 14 October). Both sectors are centralised, i.e., responsibilities at the level of ECEC financing, monitoring and curriculum development are set at the national level.

This split system has been the focus of debate and criticism. This led the Portuguese National Education Council² to present, in 2011, a formal set of recommendations on the education of children up to 3 years of age (Vasconcelos 2011). The document stresses the need for the 0-3 sector to be integrated into the education system (requiring an amendment to the Education Act), progressive responsibility of the ME in this sector, and an articulated form of shared governance by the two ministries until full governance through the ME is reached.

At the governance level, two further initiatives are particularly noteworthy:

- (i) Inter-ministerial collaboration between MWSSS and ME on the development of a pedagogical framework for children up to 3 years of age. These pedagogical guidelines have been produced but not yet made available to the professional community;
- (ii) Defining underpinning educational principles for the 0-6 phase, safeguarding the unity and continuity of early childhood pedagogy. These common educational principles are integrated in the updated and revised edition of the Curricular Guidelines for Pre-School Education (Lopes da Silva, Marques, Mata, and Rosa 2016) and will be integrated into the pedagogical guidelines for working with children 0-3.

2. Who belongs to the early years workforce?

2.1 Regular contact staff in ECEC provision

The staff categories in Portuguese ECEC provision are:

Educadora/educador de infância (Early Childhood Teacher)

The specific professional profile of the Early Childhood Teacher was legally established in 2001, through the Decree-Law 241/2001, 30 August. This document set the legal framework for the organisation of the initial teacher education/training. Early Childhood Teachers are qualified to work with children from 0 to 6 years old, both in the *estabelecimentos de educação pré-escolar/jardins de infância* for 3- to 6-year old children and in the *creches* for 0- to 3-year olds. Their professional qualification includes a three-year Bachelor's degree in Basic Education followed by a 3-semester Master's degree in Pre-School Education OR a four-semester Master's

¹ Corresponding to *family day care ECEC* or *licensed home-based ECEC* (OECD 2017, 60).

² The National Education Council (*Conselho Nacional de Educação – CNE*) is an independent advisory body on educational issues that produces statements and recommendations according to its own agenda or as a response to requests from the Parliament or the Government (<http://www.tcnedu.pt/pt/>).

degree in Pre-School and Primary Education. In the latter case, the professional is qualified for working with children up to 10 years of age, both in early childhood education and primary education.

Assistente operacional (Auxiliary Staff)

The Portuguese Education Act establishes that auxiliary staff should have completed compulsory education, corresponding presently to a minimum of 12 years of schooling. In some cases, municipalities may give priority to staff with a related qualification (see *Section 3.1*).

The functions of auxiliary staff are described in Decree Law 184/2004, 29 July (annexe III) and include the logistical support of the Early Childhood Teacher, hygiene and cleaning of spaces, space security and surveillance/supervision of children indoors and outdoors, and guaranteeing the opening and closing times, including welcoming the children and being there when the children are picked up by their parents. Moreover, Portuguese regulations do not prescribe the need for an Early Childhood Teacher in 'rooms for infants' (*berçário*), which means that the monitoring and supervision of babies up to 12 months is guaranteed by employing two auxiliary staff members per group.

Diretor técnico (Technical Director/Centre Head) and **diretor pedagógico** (Pedagogical Director)

Each infant-toddler centre (*creche*) is coordinated by a *diretor técnico* (Technical Director/Centre Head) who is, preferably, an Early Childhood Teacher, but can also be a professional with a degree in another domain of the Educational Sciences or the Human and Social Sciences. According to Order no. 262/2011, the responsibilities of the *diretor técnico* are: to develop a management model that guarantees the functioning of the infant-toddler centre; to supervise the admission of new professionals; to promote the continuous improvement of the services provided (including the management of quality programmes); to manage, coordinate and supervise professionals; to implement staff education/training programmes; to encourage the involvement of the technical team and families in the planning and evaluation of activities; to ensure collaboration with external entities and services. In many cases, the Centre Head is also a core practitioner with responsibility for a group of children and pedagogical responsibility for the activities carried out in 'baby rooms' (*berçário*) by auxiliary staff.

Each kindergarten/preschool (*estabelecimento de educação pré-escolar/jardim de infância*) is coordinated by a Pedagogical Director who is responsible for the implementation of the curricular orientation guidelines and the coordination of the educational programme. In spite of some legal vagueness concerning the required qualification for this role (Law no. 5/97), the Pedagogical Director is, in the majority of cases, an Early Childhood Teacher who has had sufficient experience of being responsible for a group of children as a core practitioner.

Docente de educação especial (Special Education Teacher)³

The *docente de educação especial* collaborates in the creation and promotion of conditions for the socio-educational inclusion of children with special needs. The prime function of this professional is to guarantee educational support to the ECEC centre, the Early Childhood Teacher, the child and the family in the organisation and management of differentiated resources and measures for the teaching-learning process. The Special Education Teachers must possess a higher education degree in teaching (preferably, in early childhood education, but not mandatory) and a specialised training course in special education at a university or higher education

³ In Portugal, the assistance to children with disabilities from birth up to 6 years involves two systems: (i) the National Early Childhood Intervention System (*Sistema Nacional de Intervenção Precoce na Infância*), under the coordinated work of the Ministries of Work, Solidarity and Social Security, Health and Education. This system provides services to children from birth up to 6 years of age through local resource units, in cooperation with families and professionals working in infant-toddler centres or pre-schools; (ii) The special education services governed by the Ministry of Education that provide services in the public sector from pre-school to the end of secondary education (Sanches-Ferreira, Silveira-Maia, Lopes dos Santos, and Santos 2017).

institution (polytechnic). These courses are accredited by the Scientific and Pedagogical Council of In-service Training and have a minimum of 250 contact hours. In order to gain access to these courses, besides the teaching certification, candidates must have had at least five years of teaching practice.

Besides the Special Education Teacher, other specialist professionals such as occupational and speech therapists, physiotherapists, psychologists, interpreters and teachers of sign language, and experts on mobility and orientation training support the Early Childhood Teacher and the auxiliary staff in ECEC centres. The number and type of professionals that are integrated into the special education teams depends on the resources that are available in each ECEC centre (Sanches-Ferreira, Silveira-Maia, Lopes dos Santos, and Santos 2017).

Table 1 gives an overview of the staff in regular daily contact with children in centre-based ECEC provision. It also categorises the core practitioners (i.e. staff with group or centre responsibility) according to one of five ECEC professional profiles adapted from the original SEEPRO study (see Box 1 following Table 1).

Table 1
Portugal: ECEC staff in centre-based settings

Job title	Main ECEC work-place settings and age-range	Main position/s	Main age-range focus of IPS	Minimum qualification requirement and ECTS points/EQF level/ ISCED level ⁴
<i>Educador/a de infância</i> Early Childhood Teacher <i>Profile:</i> Early Childhood Pedagogy Professional <i>In some cases:</i> Pre-primary and Primary Education Professional	<i>Creche</i> Infant-toddler centre 0-3 years <i>Estabelecimento de educação pré-escolar/jardim de infância</i> Preschool/kinder-garten 3-6 years	Core practitioner with group responsibility	0-6 years	Bachelor's degree in Basic Education, 3 years university or polytechnic ECTS points: 180 plus Master's degree in Pre-school Education (3 semesters) ECTS points: 90 EQF: Level 7 ISCED 2013-F: 0112 ISCED 2011: 75
			0-10 years	Bachelor's degree in Basic Education, 3 years university or polytechnic ECTS points: 180 plus Master's degree in Pre-school and Primary Education (4 semesters) ECTS points: 120 EQF: Level 7 ISCED 2013-F: 0112, 0113 ISCED 2011: 75
<i>Assistente operacional</i> Auxiliary staff	<i>Creche</i> Infant-toddler centre 0-3 years <i>Estabelecimento de educação pré-</i>	Co-workers without specialist qualification	n/a ⁵	Compulsory school certificate ECTS points: n/a EQF: Level 3/4 ISCED 2013-F: 0922 (preferably, but not compulsory)

⁴ UNESCO 2012, 2014.

⁵ n/a = not applicable

Job title	Main ECEC workplace settings and age-range	Main position/s	Main age-range focus of IPS	Minimum qualification requirement and ECTS points/EQF level/ ISCED level ⁴
	<i>escolar/jardim de infância</i> Preschool/kinder-garten 3-6 years			ISCED 2011: 3
<i>Diretor técnico/ Diretor pedagógico</i> Specialist Director/Centre Head Pedagogical Direc- tor/Centre Head <i>Profile (mainly):</i> Early Childhood Pedagogy Profes- sional	<i>Creche</i> Infant-toddler centre 0-3 years (in the case of the technical director) <i>Estabelecimento de educação pré- escolar/jardim de infância</i> preschool/kinder- garten 3-6 years (in the case of the pedagogical direc- tor)	Centre head (in most cases also a core practitioner with group responsibility)	0-6 years or 0-10 years In cases in which the direc- tor is not an Early Childhood Teacher, the age range is unspecified	A degree in Early Childhood Education (or other domain of the Educational Sciences or Human and Social Scienc- es) ECTS points: 180+90/120 EQF: Level 7 ISCED 2013-F: 0112, 0113 ISCED 2011: 75
<i>Docente de educação especial</i> Special Education Teacher <i>Profile:</i> Early Childhood Pedagogy Profes- sional (special needs) <i>In some cases:</i> Pre- primary and Prima- ry Education Pro- fessional (special needs)	<i>Creche/ama/ Estabelecimento de educação pré- escolar</i> Infant-toddler centres/ family day care / preschools 0-6 (in the case of the National Early Childhood Interven- tion System) <i>Estabelecimento de educação pré- escolar/jardim de infância</i> preschool/kinder- garten 3-6 years (in the case of special education services provided by the Ministry of Education)	Specialist support worker	0-6 years (in the case of the National Early Childhood Intervention System) or 3-18 (in the case of special education ser- vices provided by the Ministry of Education)	A higher education degree in teaching (180 ECTS points) plus A specialised training course in special education ECTS points: 50 (the specific number of ECTS points is established by each higher education institution on the basis of a mandatory minimum of 250 contact hours) EQF: Level 7 ISCED 2013-F: 0112, 0113 ISCED 2011: 75

Box 1

SEEPRO professional profile categories for core practitioners (adapted from Oberhuemer, P., I. Schreyer, and M.J. Neuman 2010)

- *Early Childhood Pedagogy Professional* (specialist focus, 0– 6/7 years)
- *Pre-primary Education Professional* (exclusive pre-primary focus 3/4–6 years)
- *Pre-primary and Primary Education Professional* (focus on pre-primary *and* primary education 3/4–10/11 years)
- *Social and Childhood Pedagogy Professional* (broad focus, including ECEC, usually 0–12 years, but sometimes including adults)
- *Social Care/Health Care Professional* (sometimes focus on early childhood, sometimes broad focus, including adults)

2.2 Structural composition of ECEC workforce: qualifications, gender, ethnicity

Data on the structural composition of ECEC workforce are difficult to access, not only because of the split system that characterises ECEC services in Portugal, but also because data are usually presented in a global form (e.g., in the public sector, the available data integrates information on pre-primary, primary and secondary education).

Concerning the qualifications of Early Childhood Teachers, the only available information relates to the professionals working in pre-primary settings (public and private) under the governance of the Ministry of Education. This information is reported in documents issued by the Directorate General of Education and Science Statistics (*Direção-Geral de Estatísticas da Educação e Ciência*) and reports on a total of 16,002 Early Childhood Teachers (55.9% in the public sector and 44.1% in the private sector).

Table 2

Portugal: Structural composition of ECEC provision (3-6) under the Ministry of Education: qualifications, gender, ethnicity

Staff categories	Year / Proportion of workforce
Early Childhood Teachers with higher education degree:	2015/16*
- Three-year bachelor degree or equivalent	12.7%
- Four-year bachelor degree (<i>licenciatura</i>) or equivalent	81.5%
- Master's or Doctoral degree	5.8%
Specialist support staff (e.g. Special Needs Teachers) (N=7,264)	2016/17** With a specialisation in special education: 99.1% Full time employment: 95%
Staff with non-specialist qualification	No data available
Staff with no formal IPS	No data available
Male staff	2015/16: 0.9%*
Staff with a background of migration	2014/15: 1.1%***

*Direção-Geral de Estatísticas da Educação e Ciência n.d.-a.

**Direção-Geral de Estatísticas da Educação e Ciência n.d.-b.

***Direção-Geral de Estatísticas da Educação e Ciência 2016. The most frequently represented countries of origin are Angola, France and Brazil.

No systematically compiled national data are available for the 0-3 sector.

3. Initial professional studies (IPS)

3.1 Initial qualifying routes – higher education and vocational

Early Childhood Teacher (*educador/a de infância*)

As previously stated, the Early Childhood Teacher's initial professional studies are characterised by a sequential model that integrates a Bachelor's degree in Basic Education (*Licenciatura em Educação Básica*) and a professional Master's degree in Pre-school Education (*Mestrado em Educação Pré-Escolar*) or Pre-school and Primary Education (*Mestrado em Educação Pré-Escolar e Ensino do 1.º Ciclo do Ensino Básico*). This model was established at the national level in 2007. The access to the 1st cycle of studies, Bachelor in Basic Education, requires successful completion of secondary education and of national exams of Portuguese and Mathematics. Entry requirements for the 2nd cycle of studies, corresponding to a Master's degree, are the

successful completion of the Bachelor's degree in Basic Education and an exam in Portuguese language. Depending on the institution, selection may also involve an analysis of the candidate's curriculum vitae and/or an interview.

The Bachelor's degree in Basic Education is common for all candidate teachers, from the pre-primary to the secondary level of education. Course length is six semesters, corresponding to 180 ECTS points. During the 2nd cycle of studies, there are two options: (i) a professional Master in Pre-School Education, lasting three semesters (90 ECTS points), which qualifies for working with children 0-6 (EQF Level 7); (ii) a professional Master in Pre-School and Primary Education, lasting four semesters (120 ECTS points), which qualifies for working with children 0-10 (EQF Level 7).

Table 3

Portugal: Early Childhood Teacher

<p>Job title in Portuguese: <i>Educador/a de infância</i></p> <p>Profile: Early Childhood Pedagogy Professional <i>or</i> Pre-primary and Primary Education Professional</p>
<p>Entry requirements: The requirement for both cycles of studies is a Bachelor's degree in Basic Education</p> <p>Professional studies: Master's degree in Pre-School Education (3 semesters) or Master's degree in Pre-School and Primary Education (4 semesters)</p> <p>Award: Master's degree in Pre-School Education (<i>grau de Mestre em Educação Pré-Escolar</i>) or Master's degree in Pre-School and Primary Education (<i>grau de Mestre em Educação Pré-Escolare Ensino do 1.º Ciclo do Ensino Básico</i>)</p> <p>ECTS points: 270 / 300 (depending on the type of Master's degree)</p> <p>EQF level: 7</p> <p>ISCED 2013-F: 0112 / 0112, 0113 (depending on the type of Master's degree)</p> <p>ISCED 2011: 75</p> <p>Main ECEC workplace: infant-toddler centres, pre-primary settings (and primary schools, if qualified through the Master in Pre-School and Primary Education)</p>

Auxiliary staff (*assistente operacional*)

Auxiliary staff are required to have completed compulsory education that corresponds, in Portugal, to 12 years of schooling (secondary education). This formal requirement is set at the national level. No specific pedagogical requirements need to be met. In some cases, recruitment through the municipalities privileges additional preparation, such as a specialist course for gaining the title of 'specialist in educational activities' (*técnico de ação educativa*) (EQF Level 4) or a three-year secondary vocational course specifically focused on child support (*técnico de apoio à infância*) (EQF Level 4). Recruitment may also take place through employment centres, as a measure to promote the professional integration of unemployed persons.

Table 4

Portugal: Auxiliary staff

<p>Job title in Portuguese: <i>Assistente operacional</i></p>
<p>Entry requirements: Secondary education diploma</p> <p>Professional studies: No specific professional requirements need to be met, although related vocational qualifications may be favourable for recruitment.</p> <p>Award: Diploma of secondary education (<i>diploma de nível secundário de educação</i>)</p> <p>ECTS points: n/a</p> <p>EQF level: 3 or 4 (in the case of completion of a vocational course)</p> <p>ISCED 2013-F: 0922 (preferably, but not compulsory)</p> <p>ISCED 2011: 34 (or 35)</p> <p>Main ECEC workplace: infant-toddler centres, pre-primary settings</p>

Technical Director/ Pedagogical Director (*diretor técnico/ diretor pedagógico*)

The Technical Director/Centre Head, who guarantees the coordination and management of infant-toddler institutions, and the Pedagogical Director/Centre Head, who coordinates and manages pre-schools/kindergartens, are in most cases experienced Early Childhood Teachers. An additional qualification in management is not required.

Table 6

Portugal: Technical Director (infant-toddler centres) and Pedagogical Director (pre-primary settings)

<p>Job title in Portuguese: <i>Diretor técnico/ Diretor pedagógico</i></p> <p>Profile: Early Childhood Pedagogy Professional <i>or</i> Pre-primary and Primary Education Professional</p>
<p>Entry requirements: The same requirements as for the Early Childhood Teacher (see Table 3).</p> <p>Professional studies: The same requirements as for the Early Childhood Teacher (see Table 3). In some cases, the holders of these posts may possess a five-year higher education degree in another domain, such as Educational Sciences.</p> <p>Award: Higher education degree (Master-level)</p> <p>ECTS points: 270 / 300 (depending on the higher education degree)</p> <p>EQF level: 7</p> <p>ISCED 2013-F: 0112 / 0112 and 0113. Other detailed fields, such as 0111 (Educational sciences)</p> <p>ISECD 2011: 75</p> <p>Main ECEC workplace: infant-toddler centres (Technical Director) and pre-schools/kindergartens (Pedagogical Director)</p>

Special Education Teacher (*docente de educação especial*)

Special Education Teachers are required to complete a higher education degree in teaching (preferably in early childhood education, but not mandatory). This is followed by a mandatory training course in special education (*curso de especialização em educação especial*) taught at a university or polytechnic, with a minimum of 250 contact hours. In order to gain access to this course, candidates must also possess at least five years of teaching practice.

Table 7

Portugal: Special Education Teacher

<p>Job title in Portuguese: <i>Docente de educação especial</i></p> <p>Profile: Early Childhood Pedagogy Professional (special needs) <i>or</i> Pre-primary and Primary Education Professional (special needs)</p>
<p>Entry requirements: the same requirements as for the Early Childhood Teacher (see Table 3). Besides these, the access to a specialised course in special education is dependent on a minimum of five years of teaching experience.</p> <p>Professional studies: a higher education degree in teaching and a specialised course in special education</p> <p>Award: Diploma of specialised training course in special education (<i>Diploma de curso de formação especializada em educação especial</i>)</p> <p>ECTS points: 270 / 300 (depending on the higher education degree) and a specialised course of around 50 ECTS points (the specific number of ECTS is established by each higher education institution, on the basis of a mandatory minimum of 250 contact hours)</p> <p>EQF level: 7</p> <p>ISCED 2013-F: 0112 / 0112 and 0113</p> <p>ISECD 2011: 75</p> <p>Main ECEC workplace: (i) Local intervention teams that support infant-toddler centres/childminders/preschools (in the case of the National Early Childhood Intervention System); (ii) preschools/kindergartens (in the case of special education services governed by the Ministry of Education)</p>

3.2 Competences and curricula in IPS programmes for core practitioners

Given that no specific IPS requirements are needed for auxiliary staff or the Centre Heads, the following focuses on the Early Childhood Teacher and the Special Education Teacher.

Early Childhood Teacher (*educador/a de infância*)

In 2007, within the Bologna Process, a new legal framework for the professional qualification of staff in pre-school, basic and secondary education emerged, through Decree-Law no. 43/2007 (22 February), in the meantime replaced by Decree-Law no. 79/2014 (14 May). One of the major changes was the transition from an integrated model to a sequential or biphasic model comprising a Bachelor's and a Master's degree. The following takes into account these two education/training cycles for Early Childhood Teacher initial professional preparation.

Bachelor in Basic Education (*Licenciatura em Educação Básica*)

The Bachelor in Basic Education is a three-year course of study (6 semesters, 180 ECTS points) for all teachers in the education system, regardless of their subsequent professional profile.

Competencies: This first cycle aims to promote generic and transversal competencies that prepare for assuming a professional role in a diversity of educational contexts. Competencies encompass: (1) observing and evaluating educational contexts (formal and non-formal); (2) knowing and understanding the professional profiles of the Early Childhood Teacher and Basic Education Teacher; (3) developing educational projects and resources; (4) mobilising knowledge for working in early childhood, basic education and non-formal education contexts in an integrated and contextualised way; (5) reflexive, investigative and critical competencies.

Curriculum: The basic education/training components are prescribed by law (Decree-Law 79/2014) as (1) Teaching; (2) General education; (3) Subject-specific didactics; (4) Cultural, social and ethical dimension; and (5) Initiation into professional practice. The cultural, social and ethical dimension does not have formally allocated ECTS points but is integrated into the other components of education/training. Minimum ECTS points are distributed as follows:

Table 8

Portugal: First stage of IPS of Early Childhood Teachers, curriculum structure

Curricular areas	Minimum ECTS points
Teaching	125
General education	15
Subject-specific didactics	15
Initiation into professional practice	15

The particular focus of this *licenciatura* is on the knowledge needed for *teaching* in certain content areas or disciplines. The distribution of the 125 ECTS points prescribed by law is as follows: Portuguese (30 ECTS points); Mathematics (30 ECTS points); Natural Sciences, and History and Geography of Portugal (30 ECTS points), Expressive Arts (Music, Visual Arts, Drama) and Physical/Motor Expression (30 ECTS points). The higher education institution is free to allocate the remaining 5 ECTS points to selected content areas.

Curricular units focusing on these four content areas (see Table 8) are distributed throughout the three-year cycle of studies. *General education* includes the knowledge, skills and attitudes common to all teachers that are relevant for their work in the classroom, in the educational institutions and in cooperation with families and communities. It includes curricular units in the domains of developmental psychology, cognitive psychology, curriculum and assessment, organisational studies or special education. *Subject-specific didactics* and *initiation into profes-*

sional practice in educational institutions have limited presence in this cycle of studies (they are maximised at master's level). The integration of field studies into the overall course of study varies among the higher education institutions, with some institutions offering observation and cooperation experiences throughout the three years and others tending to provide these experiences only in the final year of the course.

Pedagogic-didactic approaches: The pedagogic-didactic approaches can vary among higher education institutions. However, two tendencies were identified in a study carried out by Almeida and Lopo (2015) in 17 Portuguese institutions of higher education: (i) a cluster of institutions with a profile characterised by the use of artistic and physical-motor experimentation, problem solving strategies, the use of authentic materials (materials that can be manipulated and worksheets) and the diary as an element of written assessment; (ii) a cluster of institutions characterised by the use of experimental activities / laboratory practices and simulation as activities to stimulate the appropriation of knowledge, and by the use of a project approach to assess learning.

In spite of these findings, the limited number of hours allocated to specific didactics and in particular to initiation into professional practice has been criticised as hindering the integration of theoretical and practical knowledge and, as a consequence, the effective construction of professional knowledge.

Master in Pre-School Education (*Mestrado em Educação Pré-Escolar*)

Competencies: The Master in Pre-School Education focuses on the professional specialisation of Early Childhood Teachers working with 0- to 6-year olds. Despite the course descriptor (*educação pré-escolar* corresponds to the 3-6 sector), the entity that formally evaluates and accredits higher education courses in Portugal, the Agency for Assessment and Accreditation of Higher Education (*Agência de Avaliação e Acreditação do Ensino Superior – A3ES*) has been emphasising the need to reinforce the education/training of educators for working in infant/toddler centres. The competencies that the prospective Early Childhood Teacher needs to develop are closely aligned to the general and specific professional profile of the Early Childhood Teacher (Decree-Law 241/2001, 30 August, annex 1). For example, the intended general learning outcomes (knowledge, skills and competences) of the Master in Pre-School Education of School of Education of the Polytechnic Institute of Porto are: (1) To mobilise scientific, pedagogical and cultural knowledge in the design, development and evaluation of a curricular project; (2) To organise the educational environment in its various pedagogical dimensions; (3) To encourage the development of positive and stimulating interactions with children; (4) To develop systematic participant observation and regulatory reflection (about contexts, processes and learning outcomes); (5) To plan and evaluate educational activities that are adequate for the development of integrated learning, considering strategies of pedagogical differentiation; (6) To develop strategies of collaborative and team work; (7) To promote actions that will facilitate continuity of learning (with families, community and other different levels of education); (8) To problematise the demands of professional practice in a grounded, reflexive and ethical way, considering a lifelong learning approach.

Curriculum: Decree-Law 79/2014 prescribes the following distribution of ECTS points for each of the four education/training components: (i) *Teaching*: a minimum of 6 ECTS points; (ii) *General education*: a minimum of 6 ECTS points; (iii) *Subject-specific didactics*: a minimum of 24 ECTS points; (iv) *Initiation into professional practice*: a minimum of 39 ECTS points.

This reflects a major focus on didactic approaches towards the teaching of Portuguese, Mathematics, Natural Sciences, History and Geography of Portugal, as well as the areas of Music, Visual Arts, Drama and Physical/Motor expression.

Another key component is the *initiation into professional practice*, which covers a minimum of 43% of the overall ECTS points. This component is composed of curricular units of Supervised Educational Practice (*Prática Educativa Supervisionada*) that integrate periods of practicum in early childhood contexts (infant-toddler centres and pre-schools/ kindergartens) (see *Section 4*

for further information on this component). The plan of studies also integrates a curricular unit on Methods of Research in Education that intends to support the candidate teachers' learning in the contexts of practice. In most cases, a curricular unit of Childhood Pedagogy or Early Childhood Education Methodology is also allocated to the plan of studies.

Pedagogic-didactic approaches: The curricular units of Supervised Educational Practice constitute the core of this cycle of studies, fuelled and supported by other curricular units, namely the subject-specific didactics. The practicum periods aim for the construction of professional knowledge, competences and attitudes, and are sustained by active and heuristic-hermeneutic methodologies: observation, supported experimentation, dialogue, and reflection. Research processes are valued throughout the professional preparation that encompass simultaneously several hours at the workplace and theoretical-practical classes at the higher education institution. A triadic model of supervision is frequently used, involving the prospective Early Childhood Teacher, the cooperating educator and the supervisor of higher education, aiming at stimulating students' critical and reflexive analysis and the articulation between theory and practice.

Master in Pre-School and Primary Education (*Mestrado em Educação Pré-Escolar e Ensino do 1.º Ciclo do Ensino Básico*)

Competencies: The course of study for the professional Master is of two years' duration (four semesters) and focuses on the professional specialisation for both early childhood and primary education. The competencies to be developed by the prospective Early Childhood Teacher/Primary Teacher are closely aligned to the professional profile (Decree-Law 241/2001, 30 August) of the Early Childhood Teacher (annex 1) and the Primary Teacher (annex 2).

Curriculum: Decree-Law 79/2014 prescribes the following distribution of ECTS points for each of the four education/training components: (1) *Teaching*: a minimum of 18 ECTS points; (2) *General education*: a minimum of 6 ECTS points; (3) *Subject-specific didactics*: a minimum of 36 ECTS points; (4) *Initiation into professional practice*: a minimum of 48 ECTS points. Once again, subject-specific didactics (Portuguese, Mathematics, Natural Sciences, History and Geography of Portugal, and the areas of Arts and Movement Expression) and the initiation into professional practice (curricular units of supervised educational practice carried out in pre-schools and primary schools) constitute the core of the plan of studies. This plan also integrates curricular units specifically designed for each of the educational levels included in this course of study. The plan of studies integrates a curricular unit on Methods of Research in Education that intends to support the candidate teachers' learning in the contexts of practice.

Pedagogic-didactic approaches: The pedagogic-didactic approaches are of the same nature as those that characterise the Master in Pre-School Education.

Special Education Teacher (*docente de educação especial*)

Competencies: As described in *Section 3*, the Special Education Teacher must possess a higher education degree in teaching and a specialised training course in special education (*Diploma de curso de formação especialisada em educação especial*). The legal framework for this specialised training defines the following main objective: to qualify for the tasks of support, accompaniment and socio-educational support to individuals with special educational needs. It also specifies competencies in the following domains: (1) critical analysis; (2) intervention; (3) training, supervision and assessment; and, (4) consulting.

Curriculum: The courses have a minimum of 250 contact hours, comprising three training components: (1) General training in the educational sciences (maximum 20% of total contact hours); this component must encompass, among others, contents relating to research in edu-

cation; (2) Specific training in special education (minimum 60% of total content hours); and, (3) Elaboration, development and evaluation of a project in the domain of special education.

Pedagogic-didactic approaches: The organisation of these courses should privilege a scientific and pedagogical approach and not a merely technical or administrative approach. Each course should take into consideration the specificity of the education levels in which the professionals work. Components (1) and (2) focus on different aspects of theoretical-practical issues. Component (3) represents an important approach, aiming at the development of project-related research activities by the candidates that result in a report subjected to public discussion before a jury. The conception, implementation and evaluation of the projects are recognised as an opportunity for linking the three components of the specialisation course and for the development of research competences by the candidates.

3.3 Alternative entry and qualification routes, system permeability

Since the Decree-Law 79/2014 came into force, the exclusive entry requirement for a Master's degree in teaching is a completed three-year Bachelor's degree in Basic Education. There are no other pathways of access. The professionals that hold a three-year or four-year Bachelor's degree in Early Childhood Education, i.e. all professionals who qualified as Early Childhood Teachers before the Bologna Process, are formally recognised as fully qualified early childhood core practitioners. This has led to a scenario of coexistence of different levels of qualification within the profession, with 13.1% of core professionals holding a three-year bachelor's degree, 81.8% a four-year bachelor's degree or equivalent, and 5.1% a master's or doctoral degree (see Table 2). This also means that there is a growing tendency for younger practitioners to hold higher qualifications.

Formal opportunities for moving up and across qualifications frameworks

The Career Statute of Pre-school, Basic and Secondary Teachers (*Estatuto da Carreira Docente dos Educadores de Infância e dos Professores dos Ensinos Básico e Secundário*) (Decree-Law n. 139-A/90, 28 April, subjected to several amendments until the present day) establishes the following formal requirements for career progression: length of service; performance assessment (minimum qualitative assessment: "Good"); the successful completion of continuous education/ training or specialised courses (a minimum of 25 or 50 hours, depending on the career echelon). In some career echelons, class observations are required for progression to the next level, which also depends on whether or not a vacancy exists. In spite of these opportunities stated by law, the career progression in public posts has stagnated since 2011 as a result of austerity measures.

The career progression of educators working in the 0-3 sector is not subjected to the same requirements and is dependent on the decisions of the employers.

Options for men and women with non-specialist qualifications (career changers)

For those who have no specialist qualification, the options are limited to the completion of a higher education degree. Since 2015, it is also possible to obtain a formal authorisation for working as a childminder/ nanny if the candidate possesses an upper secondary education diploma and completes short term units of training from the National Qualifications Catalogue in the domain of support services for children and youth. Auxiliary staff that worked in an infant-toddler centre (*creche*) during a minimum period of one year over the last two years can also become a childminder.

4. Workplace-based learning in the IPS of core practitioners

At the Master's level, the curricular area of *Initiation into Professional Practice* is called Supervised Teaching Practice (*prática de ensino supervisionada*). This component is organised around the following principles (Art. 11): "(a) Includes the observation and collaboration in education and teaching situations and the supervised practice in the activity room or classroom, in early childhood education institutions or in schools; (b) Provides experiences of planning, teaching and assessment to the trainees, according to the functions that are attributed to the teacher, inside and outside the classroom; (c) is carried out in groups or classes of the different levels and cycles of studies that are covered by the recruitment group for which the cycle of studies prepares; it should, if possible, be carried out in more than one establishment of education and teaching that is integrated, or not, in the same school cluster or in the same titular entity, in the case of particular or cooperative teaching; (d) is conceived in an education/ training perspective focused on the articulation between knowledge and the way of transmitting it, aiming learning; (e) is conceived in a perspective of professional development of trainees and promotes an attitude oriented towards the permanent improvement of their students' learning" (Decree-Law 79/2014, Art. 11, 2821).

ECTS points and duration: The number of ECTS points allocated to this curricular component is specified in Decree-Law 79/2014. Thus, higher education institutions must take into account the following specifications:

- Bachelor in Basic Education - a minimum of 15 ECTS points (divided among different age levels, including formal and non-formal educational settings);
- Master in Pre-School Education - a minimum of 39 ECTS points (divided between infant-toddler institutions and pre-schools);
- Master in Pre-School and Primary Education - a minimum of 48 ECTS points (expectedly divided between the two education levels).

The organisational logic behind this distribution is to reinforce practicum experiences in the final stage of education/ training of prospective Early Childhood Teachers. Departing from these ECTS specifications, each higher education institution establishes the number of hours and overall organisation of time blocks. Generally, at the level of Master's programmes, the students spend three or four days per week (five hours a day, in most cases) in ECEC centres and one or two days per week in IPS institutions, attending classes (theoretical-practical; tutorial meetings; seminars).

Cooperation between IPS institutions and ECEC centres: The national legal framework (Decree Law 79/2014) also establishes the conditions for the cooperation between the IPS institutions and ECEC centres, designated as cooperating schools (*escolas cooperantes*). It states the need for a formal, multi-annual cooperation protocol between the two institutions. This protocol should include the following (Art. 22): (a) Levels and cycles of education and teaching in which Supervised Teaching Practice is carried out; (b) Named cooperating supervisors (*orientadores cooperantes*) and any compensatory payments made available to the cooperating ECEC centre; (c) Number of places available for students; (d) Roles, responsibilities and competences of all stakeholders, including students; (e) Conditions for the 'supervised teaching practice' in the activity rooms, always in the presence of the cooperating supervisor; (f) Conditions for the participation of students in other curricular and organisational development activities outside the activity room, provided that they are supported by cooperating supervisors; (g) Counterparts made available to the cooperating schools by the higher education institution.

Students' learning and assessment: Decree-Law 79/2014 does not specify the skills and competencies students are expected to develop in the workplace. However, the principles inherent to the education/ training component of Initiation into Professional Practice emphasise the importance of observation, planning, teaching, assessing and collaboration processes throughout the practicum experiences. Also, these principles stress the focus on children's learning

through the articulation between knowledge and the way of *transmitting it* (sic) and state the importance of adopting a perspective of professional development.

Students' self-assessment can include a variety of forms such as oral and written reflexion (individually or collaboratively), field-based journals, portfolios, etc. The responsibility for the students' external assessment is attributed to the teacher that is responsible for the curricular unit of Supervised Teaching Practice, integrating information provided by the cooperating supervisor and the pedagogical director/coordinator. The students' assessment must also encompass a practicum report subjected to public presentation and discussion before a jury.

Mentoring/ supervising staff: The same decree-law establishes the criteria for selecting cooperating supervisors. These should be selected by the higher education institution, following the previous acceptance on the part of the cooperating supervisor and the direction of the cooperating institution. Furthermore, the cooperating supervisor should possess appropriate training and experience taking into consideration the demanded functions; possess a minimum of five years of professional practice in ECEC contexts and, preferably, post-graduate studies in early childhood education, specialised training in pedagogical supervision and professional experience in supervision. The legal framework does not specify time allocation for supervision/ mentoring activities. In some cases, this specification is registered in the cooperation protocol and can vary across institutions.

The cooperating supervisors are not remunerated for their work as practicum supervisors. The higher education institution is requested to pay the travel expenses of the cooperating supervisor whenever there is a need to participate in education/ training activities and seminars, and to collaborate with the cooperating schools in the professional development of its Early Childhood Teachers, especially the other cooperating supervisors.

Recent reforms: Regarding the new legal framework that regulates teacher qualifications, critique has emerged in terms of the way it conceptualises workplace-based learning (in comparison with the previous framework, Decree-Law 43/2007), particularly the endorsement of a more transmission-oriented perspective and the elimination of the importance attributed to the development of a critical and reflexive attitude by the candidate Early Childhood Teachers.

5. Continuing professional development (CPD)

The Portuguese Education Act recognises continuing professional development as a right for all educators and teachers and emphasises its importance in complementing and updating initial professional studies within a perspective of permanent education. It also states the need for in-service education to be sufficiently diversified in order to ensure this complementary role of deepening and updating professional knowledge and competences, as well as enabling career mobility and progression.

Specific framework for regulating the CPD of ECEC personnel: In 2014, a new national legal framework for continuing teacher education/ training, Decree-Law 22/2014, came into force (see Section 6). Concerning early childhood education, this new legal framework regulates the CPD of the 3-6 sector (with the exception of private institutions not affiliated to school clusters). There is no national or regional framework for regulating the CPD of ECEC personnel working in the 0-3 sector and of non-qualified co-workers.

Main forms of CPD: Decree-Law 22/2014 considers the following forms of continuing education/ training for core practitioners: education/ training courses (*cursos de formação*), workshops (*oficinas de formação*), study circles (*circulos de estudos*), short-term activities (*ações de curta duração*), professional placements (*estágio*) and projects (*projeto*). Independently of their form, these activities must be accredited by the Scientific and Pedagogical Council of In-Service Training (SPCIST) (*Conselho Científico-Pedagógico de Formação Contínua*).

Other CPD activities can include specialised courses in higher education institutions (also accredited by the SPCIST), congresses, seminars, and research activities that confer a higher education degree (academic master or doctoral studies).

Leave entitlement specifications: For Early Childhood Teachers working in the 3-6 sector (public, and private and social solidarity settings affiliated to a public school cluster), the leaves for CPD activities developed by the central and regional services or by the school clusters are granted during working hours, preferably during non-contact time. For CPD activities initiated by the Early Childhood Teacher, leaves may not exceed five consecutive days or eight intercalated days per school year. For these early childhood educators, a one-year special leave (*licença sabática*) can be authorised in order to participate in continuing education/ training activities, complete specialised courses or develop applied research. The authorisation is dependent on the following conditions: having a permanent post, having a performance assessment equal or superior to 'Good' and working uninterruptedly as an Early Childhood Teacher for a minimum of eight years.

Leave entitlements for the 0-3 sector are dependent on the authorisations of employers.

Access opportunities to CPD/costs: CPD activities are obligatory for Early Childhood Teachers working in 3-6 public sector, influencing performance assessment and career progression. In this case, 50% of continuous CPD activities must focus on the scientific and pedagogic dimension and at least one fifth of those activities must be accredited by the Scientific and Pedagogical Council of In-Service Training. These CPD activities are free of charge for the Early Childhood Teacher. The costs for the remaining CPD activities, including Master's and doctoral studies, are usually covered by practitioners.

The most regular problem regarding access opportunities to CPD, both for core practitioners and for qualified and non-qualified co-workers, is the lack of specific opportunities for ECE continuing education/ training. When available, the most common difficulty is associated with the need to ensure a temporary replacement, given the shortage of staff.

Main providers of CPD: The main providers of CPD across the country are the education/ training centres from school clusters, higher education institutions, the education/ training centres of non-profit professional or scientific associations, central services of the Ministry of Education, and other accredited non-profit public, private or cooperative entities. According to the last report of the Scientific and Pedagogical Council of In-Service Training, in December 2016 there were 275 accredited providers: 92 education/ training centres from schools clusters; 103 higher education institutions; 52 education/ training centres from non-profit professional or scientific associations; and 28 other entities (Conselho Científico-Pedagógico da Formação Contínua 2016).

Specific conditions: The participation in specific forms of CPD can benefit the Early Childhood Teacher at the level of career progression: the completion of a Master's degree reduces by one year the time legally demanded of permanence in a given professional echelon. The completion of doctoral studies reduces that time by two years. In both cases, the degree must be completed in a scientific area directly related to the early childhood education, including Educational Sciences. Also, the result of teacher performance assessment must be at least 'Good'.

Specific qualification for heads of ECEC provision is not required. Institutions of higher education offer specialisation courses accredited by the SPCIST in domains such as School Organisation, Education Organisation, and Pedagogical Supervision and Training of Trainers, that can better prepare professionals for leadership roles. Master's and doctoral degrees in these areas are also offered in several higher education institutions. Shorter continuing education/ training activities are available in the following areas: School Administration and Educational Administration, and Leadership, Coordination and Pedagogical Supervision.

Further available courses on topics related to ECEC work may include: (i) specialised courses in higher education institutions: special education, sociocultural activities, educational orientation and education inspection; (ii) shorter continuing education/ training sessions in the four

subject domains that constitute the core of Early Childhood Teachers' education/ training (Portuguese, Mathematics, Environmental (Physical and Social) Studies, Art-related and Physical Expression), pedagogical practice and didactics, ethics and deontology, applied technologies of information and communication.

Current reforms/trends/debates: The current system of CPD for Early Childhood Teachers has been criticised for its lack of specificity and mismatch between the provided offer and the real needs of ECEC professionals and institutions. The previous Portuguese report for the SEEPRO project already stated that only a few in-service sessions were specifically designed for pre-school education needs (Formosinho and Oliveira-Formosinho 2008). A report of the National Education Council (Afonso, Folque, Bragança, and Sucena 2013), also noted that the association between the CPD system and career progression (namely the mandatory number of accredited training hours each year, in order to guarantee career progress) may have led to a tendency to access CPD initiatives not predominantly for professional development motives. This report stated the need to rethink CPD in the context of profound social, cultural and political changes, namely the context of economic and financial crisis, the retraction of public investment, the stagnation of careers progression in recent years, the new priorities of educational policy, the changes in the social representation of the teaching profession, the diminishing number of teaching posts and the decrease in demand for both pre-service and in-service education. Following some of the recommendations stated in this report, Decree-Law 22/2014 defined a new paradigm for continuing education/ training in order to foster a higher level of contextualisation, specificity and alignment with the real needs of ECEC professionals and institutions.

In spite of this amendment to the legal framework for the 3-6 sector, the lack of specificity of CPD initiatives for ECEC professionals still needs to be addressed and a more contextualised and participatory ethos strengthened.

Particularly critical is the scarcity of CPD opportunities for the 0-3 sector, with the exception of some activities carried out by professional associations, especially the Association of Professionals of Early Childhood Education (*Associação de Profissionais de Educação de Infância – APEI*). The severity of these circumstances is magnified by the visible social need around the 0-3 sector, motivating significant expansion of the ECEC network for children up to 3 years of age over the last decade (from 25% to 49.9% of national coverage, according to the latest report of the Ministry of Work, Solidarity and Social Security in 2014) and a corresponding need regarding the professionalisation of early childhood educators for this particular sector. Moreover, the CPD needs of non-qualified co-workers should also be seen as a matter of concern and public investment.

Finally, research focusing on the CPD activities for ECEC staff and their impact is very scarce, particularly large-scale research projects.

6. Recent policy reforms and initiatives relating to ECEC staffing

In this section, three recent national policy reforms will be presented, regarding different aspects that affect ECEC staffing: initial teacher education, continuing professional development and family day care (child minders).

Decree-Law 79/2014, May 2014

This decree-law approves the legal framework for the professional qualifications of teachers working at the pre-primary, basic and secondary education levels. It constitutes a revised version of the Decree-Law 43/2007, February 2014, that laid down the requirements for initial

teacher education/ training within the fundamental changes in the organisation of Portuguese higher education brought about by the Bologna Process.

Decree-Law 79/2014 maintains the sequential model adopted in 2007, comprising a three-year Bachelor's degree in Basic Education followed by a professional Master's degree in different specialties (see *Section 3*). Concerning the initial qualifying routes of Early Childhood Teachers, this revised framework reinforces the qualification in two education/ training components, subject-specific didactics and initiation into professional practice, by increasing the duration of the cycles of studies and of the relative weighting given to each of these components. The following table presents the differences in relation to the previous legal framework.

Table 8

Portugal: Changes in the legal requirements for the professional qualification of Early Childhood Teachers

	Master in Pre-School Education	
	DL (Decree-Law) 43/2007	DL 79/2014
Duration of degree studies/ ECTS points	2 semesters/ 60 ECTS points	3 semesters/ 90 ECTS points
Weighting of education/ training components	Subject-specific didactics: 15 to 20 ECTS points Initiation into Professional Practice: 30 to 35 ECTS points	Subject-specific didactics: minimum of 24 ECTS points Initiation into Professional Practice: minimum of 39 ECTS points
	Master in Pre-School and Primary Education	
	DL 43/2007	DL 79/2014
Duration of degree studies/ ECTS points	3 semesters/ 90 ECTS points	4 semesters/ 120 ECTS points
Weighting of education/ training components	Subject-specific didactics: 25 to 30 ECTS points Initiation into Professional Practice: 40 to 45 ECTS points	Subject-specific didactics: minimum of 36 ECTS points Initiation into Professional Practice: minimum of 48 ECTS points

Decree-Law 79/2014 also introduces mechanisms for establishing the number of students admitted each year to Bachelor's and Master's degrees, in order for a better adjustment between the education/ training offer and the demands of the education system.

Over the years, a number of critical issues have been voiced as a result of the changes to the initial education/ training studies motivated by the Bologna Process and maintained in Decree-Law 79/2014. In the case of Early Childhood Teachers, the professional Master's degree courses continue to use the term 'pre-school', which in Portugal, according to the Education Act, refers to the education of 3- to 6-year old children. This neglects the education of the under 3-year olds, at least at the level of the adopted nomenclature. Another salient criticism refers to the substantial decrease in the number of hours dedicated to Supervised Teaching Practice. Despite the increase in the number of ECTS points from DL 43/2007 to DL 79/2014 (see *Table 8*) the current amount continues to represent a reduction in comparison with the pre-Bologna curricular organisation (Horta 2015). The shift of focus from the promotion of a critical and reflexive attitude to an approach aiming to improve students' performativity/outcomes has also been criticised (Lopo 2016). Further issues are related to the dilution of the cultural, social and ethical dimension of IPS (Tomás, Vilarinho, Homem, Sarmiento, and Folque 2015), as well as the less visible role of research in education, which could suggest a move towards a more instrumental view of the teaching activity (Lopo 2016).

Decree-Law 22/2014, February 2014

Decree-Law 22/2014 establishes the legal framework for the continuing professional development of teachers and defines the system of coordination, management and support, mainly for the public sector provision of ECEC (3-6). Based on identified needs of the field, the Nation-

al Education Council produced a set of recommendations, namely: the need for CPD to be centred on professional practice; the promotion of stronger cooperation between ECEC settings, education/training centres, higher education institutions, pedagogical associations and trade unions; the involvement and participation of Early Childhood Teachers in the preparation and implementation of planning strategies; the need for a more robust link to professional development activities and less to career progression; the need to reinforce CPD activities for pedagogical leaders, and the need to extend it to unemployed professionals or those who have precarious employment conditions (Afonso, Folque, Bragança, and Sucena 2013).

Decree Law 22/2014 foresees the establishment of a new paradigm for this system based on seven principles: “(a) Promoting the improvement of teaching quality and the outcomes of the educational system; (b) Contextualising education/ training projects and provision; (c) Relating to the needs and priorities of schools and teachers; (d) Prioritising the scientific and pedagogical dimensions; (e) Maintaining the scientific and pedagogical autonomy of the education/ training entities; (f) Strengthening institutional cooperation between basic and secondary education establishments, higher education institutions and scientific and professional associations; (g) Promoting a culture of monitoring and evaluation oriented towards the improvement of the quality of the education/ training system” (1287). Besides these principles, the decree-law regulates different aspects of CPD: aims; domains; modalities; duration; mandatory activities; education/ training entities; accreditation and qualifications of educators/ trainers; rights and duties of trainees; processes of accreditation and certification; evaluation, recognition, certification and monitoring; competences and composition of the Scientific and Pedagogical Council of In-Service Training; role of the inspection system; and guidance and support for continuing education/ training activities.

Decree-Law 115/2015, 22 June

Although family day care and family day care personnel are not a focus of this report, recent reforms in this area have implications for the overall professionalisation of the early childhood field in Portugal - and are therefore included here. DL 115/2015 establishes the terms and conditions for becoming a registered childminder/nanny (*ama*). The need for a focus on the activity of childminders/nannies was pointed out in documents by the National Education Council (CNE n.d., Vasconcelos 2011): (i) for a progressive professionalisation of the work of *amas*, recognising their right to a specified education/ training and to a career; (ii) to guarantee support and monitoring of their activities by specialised Early Childhood Teachers; and, (iii) to update the legal framework. DL 115/2015 states that the law amendment intends “to expand the network of *amas* and strengthen their training, qualification and monitoring” (4352) and at the same time, aims to impact positively on children’s developmental paths and ensure a better reconciliation between family and working life.

One of the major changes determined by this new legal framework is the liberalisation of the *amas* activity, which is no longer technically and financially framed by the Institute of Social Security (*Instituto da Segurança Social*), a dependency of the Ministry of Work, Solidarity and Social Security. The *ama* activity is now carried out within a framing institution (namely private social solidarity institutions) or through the direct contractualisation of services with parents or others who have parental responsibilities.

Among other specificities, DL 115/2015 determines that access to the profession is determined by formal authorisation on the part of the Institute of Social Security. The authorisation is dependent on a set of requirements and conditions. These mainly relate to the professional (e.g. minimum age, compulsory schooling, health conditions), but requirements are also established in terms of the home environment. The candidate does not have to attend the required short-term units of training from the National Qualifications Catalogue in two instances: possession of a higher education degree in early childhood education or work experience in an infant-toddler centre (*creche*) during a minimum period of one year over the past two years. The

rights and duties of the *ama*, conditions for the effective exercise of the activity, and the compliance system applicable to this activity are also laid down in this new legal framework.

7. Recent country-specific research relating to ECEC professionalisation and staffing issues

Praxeological research and context-based teacher education

Source: Oliveira-Formosinho, J. and J. Formosinho. 2012. (see *References* for details).

Background: The research overview is presented in a special issue of the EECERA journal focusing on praxeological research and its potential in the struggle for participative practices within classrooms and children's centres, and for social justice in early childhood education. Three articles from Portuguese authors address these premises: Formosinho and Oliveira-Formosinho 2012, Araújo 2012 and Mesquita-Pires 2012. The articles share a common link between praxeological research and context-based teacher education, which has been influencing transformative early years projects developed in Portugal over the past 20 years.

Aims: The article by Formosinho and Oliveira-Formosinho (2012) aims to present praxeological research as an alternative "for the change of pedagogical praxis, the transformation of educational contexts and the construction of empirical knowledge about complex educational realities." (591). Araújo (2012) and Mesquita-Pires (2012) present pragmatic illustrations of this potential. Araújo's study departed from the following research questions: (i) What are the main contents and processes that characterise a context-based teacher education process in education and care contexts for toddlers? (ii) What are the effects of a context-based teacher education process on the professional learning of Early Childhood Teachers? (iii) What are the effects of a context-based teacher education process on the well-being and involvement and learning experiences of children? Mesquita-Pires' study presented a central question: Which professional development strategies support educational transformation for the construction of children's participation and voice in their own learning? Mesquita-Pires aimed to identify relevant problems in a specific context, in which educators and the researcher engaged collaboratively to gather and organise relevant knowledge, analyse data and design interventions for change.

Procedure: Araújo's study was developed in an infant-toddler centre and encompassed three phases: an initial phase of multimethod evaluation of the quality of activity rooms, followed by a second phase that encompassed a context-based teacher education process centred on the transformation of quality through processes of experimentation and reflection. The third phase involved a multimethod evaluation of effects of the context-based teacher education process. Throughout the research process, three observation systems were used in a triangulated way: a narrative observation system, a category observation system and a technological observation system. Mesquita-Pires's research was developed in a pre-school institution. A single case study in the context of an action-research process was developed, centred on a cyclical process of thinking-doing-thinking. These cycles involved different interconnected phases: (i) a flexible plan; (ii) act; (iii) reflect; (iv) evaluate/ validate (describe and analyse the data, evaluate decisions and the observed effects); (v) dialogue in order to share the view with other partners (colleagues, or others). Effective Early Learning project research techniques were mainly used for data collection, which was systematically organised in a research portfolio.

Findings: The results of Araújo's project pointed out the positive effects of context-based teacher education process on the professional learning of Early Childhood Teachers, associated with a positive evolution of the quality of activity rooms. Positive effects were also identified at the level of children's well-being, involvement, quantity and equilibrium of learning experienc-

es. Mesquita-Pires's study showed the positive effects of a context-based staff development approach in the transformation of practices and on children learning and participation. According to the author, the reconceptualisation of the image of the child was a key for children's right to participate and a professional motivation for educators to change practices.

A participatory process of developing a recommendation on the education of children from birth to three

Source: Vasconcelos, T. 2013. (see *References* for details)

Aims: The article provides an analysis of the participatory process that led in 2011 to the approval by the Portuguese National Education Council (*Conselho Nacional de Educação*) of a set of recommendations to the government concerning the education of children from birth to three years of age, a process with a very relevant potential impact on the ECEC workforce in provision for children in 0-3 contexts.

Procedure: Based on documentary analysis and international research, the article stresses the importance of investing in early years, and specifically in 0-3, and describes the participatory process of developing the public statement on *Recommendations for Children from Zero to Three*. It also analyses the eleven recommendations to the government by the National Education Council's rapporteur, Teresa Vasconcelos, concerning several aspects related to the education of children in infant-toddler centres and settings provided by *amas*.

Findings: The article makes some important final remarks, pointing out the severe incoherence between the National Education Council's recommendations and legal initiatives from the government that represent a significant setback in what concerns the rights *for the youngest of our citizens*, as stated by Vasconcelos.

The role of participatory educational teams in promoting equity

Source: Formosinho, J. and I. Figueiredo. 2014. (see *References* for details)

This project was selected because it reports on research that is very scarce in Portugal: the role of educational teams and, within these, the role of educational assistants (auxiliary staff).

Aims: This study investigated the role of empowered educational teams in the development of quality and equity in early years. The main objective was to understand what it meant to work in a team in this particular context and to evaluate the quality of the educators' and the assistants' pedagogical mediation regarding their interaction as a team and with the children. Another objective was to study the consistency of their professional action, especially in regard to the image of the child, the image of the adult and the role of the situated development of learners' identities.

Procedure: The research was praxeological, centred on investigating praxis. It followed an intervention throughout four years that promoted the situated learning of the educational assistants using context-based professional education. The educational assistants were supported in their professional development by the respective Early Childhood Teacher and by a pedagogical supervisor. Data were collected through structured observations using the Adult Engagement Scale (Laevers 1994), ethnographic type observations, field notes taken during observations, photos and semi-structured interviews with all Early Childhood Teachers and educational assistants involved. The congruence of the research findings were supported and validated through triangulating information gathered from various instruments and participants.

Findings: Results showed that participatory educational teams develop more effective pedagogical and interactive skills and are more likely to reach out, in a spirit of equity and social justice, to disadvantaged children and families. In addition, participatory pedagogy and the involvement of every child in the co-construction of her own learning journey, are powerful motivators and an important contribution to overcoming passivity in the face of adversity. The study stressed that the building of participatory educational teams is critical to achieving the child's right to quality education and for policy development.

8. General workforce issues

8.1 Remuneration

In what concerns remuneration, there are differences between core practitioners working both in the public sector (3-6) and in the private sector (non-profit social solidarity or for-profit), either in 3-6 or 0-3. This disparity is due to the split system that characterises ECEC provision in Portugal (see *Section 1*). This division leads to differences in the financing systems of each Ministry and the practitioners' salaries. The salaries of Early Childhood Teachers working in the public sector depend on the professional echelons established in the Career Statute of Pre-school, Basic and Secondary Teachers. This statute establishes the same echelons, remuneration rates and career progression requirements for all teaching professionals in the public sector (from pre-school to secondary education). Since the launching of the Framework Law of Pre-School Education, Law no. 5/1997, 10 February (*Lei Quadro da Educação Pré-Escolar*), the Ministry of Education stated the intention to provide identical professional conditions for early childhood educators working in the private sector. This was materialised through a salary supplement provided by the Ministry of Education for these professionals, in order to reduce the disparities between the two sectors. In spite of this initiative, remuneration differences still persist.

In the case of posts of responsibility, the Centre Heads in the public sector have a reduction in the number of working hours. In the non-profit private sector, a higher salary is paid to the Technical Director/ Pedagogical Director (close to 10% more). Student mentors receive no monetary reward.

8.2 Full-time/part-time employment and working hours, non-contact hours

The vast majority of Portuguese Early Childhood Teachers work full time. In spite of the absence of data on this specific issue, part-time employment is a rare occurrence among ECEC staff. The most recent amendment to the General Law on Labour in Public Functions allows for part-time employment (*meia jornada*). The Early Childhood Teachers can benefit in the following cases: (i) If they are 55 years of age or older and have grandchildren under the age of 12; (ii) If they have children under 12 years of age or, regardless of age, with a disability or chronic illness.

Working hours may differ between the public and private sectors. Early childhood educators working in the public sector work 35 hours per week: 25 hours are dedicated to direct work with children (*componente letiva*) and ten hours consist of non-contact time dedicated to planning, staff meetings, work with parents and the community, research and CPD activities, etc. As for the Early Childhood Teachers working in the private sector, the number of working hours can vary. In general, those working in private non-profit institutions work the same number of hours as Early Childhood Teachers in the public sector. The professionals working in private for profit centres tend to work more hours than the educators working in the other sectors.

8.3 Staff support measures in the workplace

An induction period to support novice Early Childhood Teachers at the beginning of their professional activity is established in Portuguese law. Meanwhile, some concerns and debates have arisen concerning the induction period. This issue was recently addressed by the National Council on Education through a technical report that reunited national and international perspectives in order to contribute towards a deeper reflection on the nature and models of the

induction period (Faria, Rodrigues, Gregório, and Ferreira 2016). In Portugal, the induction period was translated into the probationary period, corresponding to one year, mandatory for all Early Childhood Teachers entering a permanent post in the public sector. According to the Career Statute of Pre-primary, Basic and Secondary Teachers, the probationary period aims at verifying the teacher's competencies regarding the required professional profile; it is carried out in the educational setting in which the (pre-school) teacher is employed. This probationary period does not exist for those Early Childhood Teachers working in the private sector.

Besides some initiatives from professional associations, particularly the *Movimento da Escola Moderna*, there is no organised system of on-site mentoring or regional networking in place aimed at improving the quality of the professional work.

8.4 Staff shortages and recruitment strategies

Over the last years, a particularly severe shortage at the level of auxiliary staff (*assistentes operacionais*) was identified in the public sector, one of the effects of the financial crises and austerity measures. This led to a recent decision by the Ministry of Education to recruit 1,500 professionals during the school year of 2017/2018 and an additional 500 professionals throughout the school year of 2018/2019, establishing two priorities: pre-schools/kindergartens and special education services. The new ordinance reviews the ratios on pre-schools, establishing one auxiliary assistant per group of pre-school children (25 children in most cases).

9. Workforce challenges – country expert assessment

In the past decades, Portugal has experienced contradictory tendencies concerning public investment in the ECEC workforce. Following the massive attention it received in the 1990s, the workforce has been faced with major setbacks during recent years due to the economic crises and austerity measures, which have had a particularly pervasive impact at the level of social and educational policies. These circumstances contribute to shape Portugal's workforce challenges in the near future and in a longer-term perspective. Particularly critical are the following.

The challenge of increasing public investment in the 0-3 sector: Over the last decade, a major investment was made in the expansion of the 0-3 sector. However, this sector continues to be governed by the Ministry of Work, Solidarity and Social Security and is not part of the Portuguese education system. The integration of ECEC services for children under 3 into the education system, under the governance of the Ministry of Education, needs to be viewed as a priority at the level of education policy, in alignment with a tendency towards integration that can be observed in several countries (OECD 2017). The lack of a national pedagogical framework, as well as the highly bureaucratic system of quality monitoring that is nowadays implemented in infant-toddler centres, are features of the system that should also be reviewed. In the 0-3 sector, the fragile pre-service and in-service education/training of professionals should also be addressed considering its influence in the qualification of this sector.

The challenge for a more specifically integrated and contextualised pre-service and in-service education/training of the ECEC workforce: At the level of Early Childhood Teachers' pre-service education, a major challenge is represented by the post-Bologna model that accentuates a disciplinary logic, creating a tension within a professional culture that is intrinsically integrated. Also, the induction period should be carefully monitored in order to truly constitute a locus of professional development. As for CPD opportunities, they should, as recommended in *Section 5*, be increasingly contextualised, specific and aligned with the real needs of ECEC professionals and institutions. Finally, an organised system of on-site mentoring or regional net-

working aimed at improving the quality of professional work should be carefully considered. The initial and in-service education of *amas* and auxiliary staff should also be given higher priority on the early years policy agenda.

Demographic challenges: The very low birth rate registered over the last years has consequences with a direct impact in ECEC workforce. Another policy challenge is related to the ageing of Early Childhood Teachers (and the teaching profession in general). This issue has been identified in several reports as one of major concern in the Portuguese educational context (e.g. Conselho Nacional de Educação 2015; DGEEC 2016; Faria, Rodrigues, Gregório, and Ferreira 2016) and is primarily due to the rise in the retirement age. This also creates a difficult situation for employing younger Early Childhood Teachers.

Investing in research initiatives focussing on ECEC professionalisation and staffing issues also presents a challenge. Another area where more research is needed concerns the close monitoring of the impact of education policies implemented in the field.

The challenge to create a robust ECEC culture: This can be perceived as an integrative challenge that encompasses all the challenges mentioned above, overlapping some other major areas of focus: the need to rethink observation, planning, action, assessment/evaluation in the context of a participatory and collaborative ethos; the needed respect for the idiosyncratic culture and identity of ECEC, and the struggle to avoid colonisation through a transmission-oriented and technocratic culture; the need for permanent and strong advocacy for ECEC professionals' societal and professional status and rights.

10. References

- Afonso, A. J., M. A. Folque, M. A. Bragança, and P. Sucena. 2013. *Recomendação sobre Formação Contínua de Educadores de Infância e Professores dos Ensinos Básico e Secundário* [Recommendation on the Continuing Education/ Training of Early Childhood, Basic and Secondary Education Teachers]. Lisboa: Conselho Nacional de Educação.
http://www.cfeco.pt/NOVO/ficheiros/cw_20150523213507.pdf
- Almeida, S. and T. T. Lopo. 2015. "Tendências da organização curricular da formação inicial de professores dos 1.º e 2.º ciclos do Ensino Básico" [Tendencies in the Curricular Organisation of Initial Education/Training of Teachers for the 1st and 2nd Cycles of Basic Education]. In *Formação Inicial de Professores* [Initial Teacher Education/Training], edited by Conselho Nacional de Educação, 85-136 Lisboa: Conselho Nacional de Educação.
- Araújo, S. Barros. 2012. "Researching Change: A Praxeological Case Study on Toddlers' Educational Contexts." *European Early Childhood Education Research Association Journal* 20 (4): 505-517.
- Conselho Científico-Pedagógico da Formação Contínua. 2016. *Relatório Anual 2016* [Annual Report 2016]. Braga: CCPFC. <http://www.ccpfc.uminho.pt/Uploads/DocsCCPFC/2017/Relatório%202016.pdf>
- Conselho Nacional de Educação. 2015. *Estado da Educação 2015* [State of Education 2015]. Lisboa: CNE. http://www.cnedu.pt/content/noticias/CNE/Estado_da_Educacao_2015_versao_digital.pdf
- Conselho Nacional de Educação. n.d. *Relatório do Estudo: A Educação das Crianças dos 0 aos 12 Anos* [Report on the Study: The Education of Children from 0 to 12 Years Old]. Lisboa: CNE. <http://www.cnedu.pt/content/antigo/files/pub/EducacaoCrianças/5-Relatorio.pdf>
- Decree-Law 139/A90 - *Estatuto da Carreira dos Educadores de Infância e dos Professores dos Ensinos Básico e Secundário* [Career Statute of Pre-school, Basic and Secondary Teachers]. (D.R. n. 98, Série I, 28 April 1990, pp. 2040(2)-2040(19).
- Decree-Law 241/2001 – *Aprova os perfis específicos de desempenho profissional do educador de infância e do professor do 1º ciclo do ensino básico* [Approves the Specific Professional Profiles of the Early Childhood Teacher and Primary School Teacher]. (D.R. n. 201, Série I-A, 30 August 2001: 5572-5575).
- Decree-Law 184/2004 - *Estabelece o estatuto específico do pessoal não docente dos estabelecimentos públicos de educação pré-escolar e dos ensinos básico e secundário* [Establishes the Specific Status of

- Non-teaching Staff in Public Pre-school, Primary and Secondary Education Establishments]. (D.R. n. 177, Série I, 29 July 2004: 4898-4914).
- Decree-Law 43/2007 – *Aprova o regime jurídico da habilitação profissional para a docência na educação pré-escolar e nos ensinos básico e secundário* [Approves the Legal Regime of Professional Habilitation for Teaching in Pre-school, Basic and Secondary Education]. (D.R. n. 38, Série I, 22 February 2007: 1320-1328).
- Decree-Law 22/2014 - *Estabelece o regime jurídico da formação contínua de professores e define o respetivo sistema de coordenação, administração e apoio* [Establishes the Legal Regime of Continuing Education/Training of Teachers and Defines its System of Coordination, Management and Support]. (D.R. n. 29, Série I, 11 February 2011: 1286-1291).
- Decree-Law 79/2014 - *Aprova o regime jurídico da habilitação profissional para a docência na educação pré-escolar e nos ensinos básico e secundário* [Approves the Legal Regime of Professional Habilitation for Teaching in Pre-school, Basic and Secondary Education]. (D.R. n. 92, Série I, 14 May 2014: 2819-2828).
- Decree-Law 115/2015 - *Estabelece os termos e as condições para o acesso à profissão e o exercício da atividade de ama, bem como o regime sancionatório aplicável à referida atividade* [Establishes the Terms and Conditions for the Access to the Profession and Exercise of the *ama* Activity, as well as the Sanctioning Regime Applicable to this Activity]. (D. R. n. 119, Série I, 22 June 2015: 4352-4359).
- Direção-Geral de Estatísticas da Educação e Ciência (DGEEC). n.d.-a. *Estatísticas da Educação 2015/2016* [Education Statistics 2015/2016]. Lisboa: DGEEC.
- Direção-Geral de Estatísticas da Educação e Ciência (DGEEC). n.d.-b. *Necessidades Especiais de Educação. Dados Estatísticos - Ano Letivo 2016/2017*. [Special Needs Education. Statistical Data - Academic Year 2016/2017]. Lisboa: DGEEC. <http://www.dgeec.mec.pt/np4/224/>
- Direção-Geral de Estatísticas da Educação e Ciência (DGEEC). 2016. *Perfil do Docente 2014/2015* [Profile of the Teacher 2014/2015]. Lisboa: DGEEC.
- Effective Early Learning Programme. 2013.
http://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=15&ved=0ahUKewi_1pf1p_WAhXLWwhoKHVn1B0EQFghvMA4&url=http%3A%2F%2Fwww.crec.co.uk%2F_literature_122495%2FEEEL_Evaluation_Report_Proforma&usq=AOvVaw1lzY-J-3BSyCz-XWdYuzia
- Faria, E., I. P. Rodrigues, M. Gregório, and S. Ferreira. 2016. *Formação inicial de educadores e professores e acesso à profissão (Relatório Técnico)* [Initial Training/Education of Early Childhood Educators and Teachers (Technical Report)], edited by Conselho Nacional de Educação. Lisboa: CNE.
- Formosinho, J. and I. Figueiredo. 2014. "Promoting Equity in an Early Years Context: The Role of Participatory Educational Teams." *European Early Childhood Education Research Association Journal* 22 (3): 397-411.
- Formosinho, J. and J. Oliveira-Formosinho. 2008. *System of Early Education/Care and Professionalisation in Portugal*. Munich: State Institute of Early Childhood Research.
- Formosinho, J. and J. Oliveira-Formosinho. 2012. "Towards a Social Science of the Social: The Contribution of Praxeological Research." *European Early Childhood Education Research Association Journal* 20 (4): 591-606.
- Horta, H. 2015. "Que Educadores Desejamos? Que Educadores Formamos?" [What Educators Do We Want? What Educators Do We Train?]. In *Formação Inicial de Professores [Initial Teachers' Education]*, edited by Conselho Nacional de Educação, 272-82. Lisboa: CNE.
- Laevers, F. "The innovative project Experiential Education and the definition of quality in education." In *Defining and Assessing Quality in Early Childhood Education*, edited by F. Laevers, 159-72. Leuven: Leuven University Press. 1994.
- Law 46/86 – *Lei de Bases do Sistema Educativo* [Education Act]. (D.R. n. 237, Series I, 14 October 1986: 3067-3081).
- Law 5/97 – *Lei-Quadro da Educação Pré-Escolar* [Framework Law of Pre-School Education]. (D.R. n. 34, Série I, 10 February 1997: 670-673).
- Lopes da Silva, I., L. Marques, L. Mata, and M. Rosa. 2016. *Orientações Curriculares para a Educação Pré-Escolar* [Curricular Guidelines for Pre-School Education]. Lisboa: Ministério da Educação/Direção-Geral da Educação.
http://www.dge.mec.pt/sites/default/files/Noticias_Imagens/ocepe_abril2016.pdf

- Lopo, T. T. 2016. “Entre Dois Regimes Jurídicos, o que Mudou no Currículo da Formação de Professores em Portugal?” [Between Two Legal Frameworks, What Changed at the Level of Curriculum in Teacher Education in Portugal?]. *Arquivos Analíticos de Política Educativa* 24 (7): 1-20.
- Mesquita-Pires, C. 2012. “Children and Professionals Rights to Participation: A Case Study.” *European Early Childhood Education Research Association Journal* 20 (4): 565-76.
- Ministry of Work, Solidarity and Social Security (Ministério da Solidariedade, Emprego e Segurança Social). 2014. *Carta Social – Rede de Serviço e Equipamentos 2014* [Social Chart – Network of Services and Equipments]. Lisboa: Gabinete de Estratégia e Planeamento do MESS. <http://www.cartasocial.pt/pdf/csosocial2014.pdf>
- Oberhuemer, P., I. Schreyer, and M.J. Neuman. 2010. *Professionals in Early Childhood Education and Care Systems: European Profiles and Perspectives*. Farmington Hills, MI: Barbara Budrich Publishers.
- OECD. 2017. *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*. Paris: OECD Publishing.
- Oliveira-Formosinho, J. and J. Formosinho. 2012. “Editorial - Praxeological Research in Early Childhood: A Contribution to a Social Science of the Social.” *European Early Childhood Education Research Journal* 20 (4): 471-76.
- Order n. 262/2011 - *Estabelece as normas reguladoras das condições de instalação e funcionamento da creche* [Establishes the Norms Regulating the Conditions of Installation and Operation of the Infant-Toddler Centres]. (D. R. n. 167, 1.ª Série, 31 August: 4338-4343).
- Sanches-Ferreira, M., M. Silveira-Maia, P. Lopes dos Santos, and M. Santos. 2017. “Portugal”. In *The Praeger International Handbook of Special Education*, edited by M.L. Wehmeyer and J.R. Patton, 197-210. Santa Barbara: Praeger.
- Tomás, C., E. Vilarinho, L. F. Homem, M. Sarmiento, and M. A. Folque. 2015. *Pensar a Educação de Infância e os seus Contextos* [Debate Early Childhood Education and its contexts]. Lisboa: Grupo Economia e Sociedade. http://fundacao-betania.org/ges/Educacao2015/actualizacoes/actualizacao_PENSAR_A_EDUCACAO_Educa%C3%A7%C3%A3o_de_%20Inf%C3%A2ncia.pdf
- UNESCO Institute for Statistics. 2012. *International Standard Classification of Education 2011*. <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>
- UNESCO Institute for Statistics. 2014. *ISCED Fields of Education and Training 2013 (ISCED-F 2013)*. Manual to accompany International Standard Classification of Education 2011. <http://unesdoc.unesco.org/images/0022/002280/228085e.pdf>
- Vasconcelos, T. 2011. *Recomendação: A Educação dos 0 aos 3 Anos* [Recommendation: The Education from 0 to 3-Years Olds]. Lisboa: Conselho Nacional de Educação. http://www.cnedu.pt/content/antigo/images/stories/Educao_dos_0-3.pdf
- Vasconcelos, T. 2013. “A Participatory Process of Developing a Recommendation for the Government about the Education of Children from Birth to Three years: The Case of Portugal”. *International Journal of Early Years Education* 21 (2-3): 125-40.