

## Initial professional studies for working with children under-three: Contemporary trends in Europe and Australasia

### Formação inicial para a ação profissional em creche: Tendências contemporâneas na Europa e Australasia

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**Abstract:** Over the last few decades, the Western world has faced major changes in the social, economic and demographic realms that have influenced the way of conceptualizing and organizing the provision for children under-three and generated attention towards the professional preparation in this sector. This article aims to present an analysis of the initial professional studies (IPS) of core professionals that work in centre-based services, both in Europe and Australasia. Secondary data from policy documents and open access databases were analysed considering three interrelated aspects: ECEC governance and its implications for IPS, minimum qualification requirements and recent policy initiatives. Results show the positive impact of integrated systems in IPS, a wide diversity of qualification requirements, the recent efforts of some countries in leveraging professional preparation, but also the challenges and pitfalls concerning a collective (ethical) commitment towards the education of younger citizens.

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**Resumo:** Nas últimas décadas, o mundo ocidental tem registado mudanças sociais, económicas e demográficas acentuadas que têm influenciado a forma de conceber e organizar a oferta para crianças menores de três anos, e têm gerado atenção relativamente à preparação de profissionais para este setor. O presente artigo tem como objetivo apresentar uma análise acerca da formação inicial de profissionais a desenvolver a sua ação em contextos de creche, na Europa e Australásia. Dados secundários oriundos de legislação e bases de dados de acesso aberto foram analisados considerando três aspetos inter-relacionados: governança e suas implicações na formação inicial, requisitos mínimos de qualificação e iniciativas políticas recentes. Os resultados mostram as vantagens dos sistemas integrados ao nível da formação inicial, uma ampla diversidade de requisitos mínimos de qualificação, os esforços recentes de alguns países para incrementar a preparação profissional, mas também os desafios envolvidos na construção de um compromisso coletivo (ético) com a educação dos cidadãos mais novos.

**Palavras-chave:** Formação profissionalizante inicial; creche; perspectivas internacionais.

## Introduction

Demographic, social and economic changes in the Western countries over the last few decades have translated into critical challenges in what concerns the education and care of children under-three. According to Formosinho (2018), phenomena such as industrialization, urbanization, massification, globalization, mediatization and informatization have created demands that exceed the possibilities of families. Particularly, mutations in labour markets have brought about transformations at the level of families' dynamics and a contingent growing demand for out-of-home centre-based early childhood education provision. In this context, paradoxical circumstances coexist in a vast majority of Western countries: on the one hand, the notorious social need surrounding the ECEC sector and the increasing number of children attending these services and, on the other hand, the detrimental conditions that affect its workforce.

According to Chu (2016, p. 266), the infant-toddler teacher workforce has the least education, the lowest pay and status, and the highest turnover of all professionals working in ECEC, which contributes to create an “invisible neglect of infants” in a critical period of children's development. In a UK infant and toddler study (GOOUCH e POWELL, 2013, p. 82), educators described themselves as, “being unimportant, invisible”, and in one most notable example, “the lowest of the low”. In the same direction, Barbosa (2010) argues that there's an invisibility of babies and toddlers in the political and pedagogical realms, in social

discourse and research, stressing the need to address the constitution of infant-toddler pedagogy(ies) and the education of teachers, leaders and other professionals.

Overall, studies addressing IPS for working with children under-three are scarce (BECK, 2013; LOIZOU e RECCHIA, 2018; WHITE, PETER, SIMS, ROCKEL e KUMEROA, 2016). These studies have been identifying a persistent lack or insufficiency of professional education/training opportunities for educators working in this profession (ARAÚJO, 2018a; BECK, 2013; CHU, 2016; RECCHIA e SHIN, 2010). In some cases, infant-toddler content is inconsistent and unclear (CHU, 2016) and educational preparation is less rigorous than that required for working with older children (RECCHIA e SHIN, 2010). Practicum experiences with birth to three year olds don't exist or have a marginal presence in study programmes (LOIZOU e RECCHIA, 2018; RECCHIA e SHIN, 2010; WHITE et al., 2016). Some studies have also identified a lack of specialist knowledge of faculty staff for addressing the specificities of babies and toddlers' education and care (BUSSEY, 2017; CHU, 2016; RECCHIA, LEE e SHIN, 2015).

Considering the current relevance of this profession and the scarcity of research associated to it, this article focuses on IPS for educators to work with children from birth to three (B-3) in centre-based services in Europe and Australasia<sup>3</sup>. The study aims to characterize contemporary trends at the level of IPS and undertake a comparative analysis of Europe and Australasia, considering three interrelated aspects: (i) governance and its influence at the level of qualification requirements; (ii) minimum qualification requirements; (iii) recent policy initiatives. Secondary data were collected through the review and analysis of relevant policy documents and open access databases, namely ECEC workforce profiles from the SEEPRO-R project<sup>4</sup>, and databases from the European Commission and the OECD.

## **European trends in the professional preparation for working with children under-three**

### **Governance and its influence at the level of minimum qualification requirements**

Historically, European ECEC services have been characterized by a persistent division between care and education that has its roots in the late 19<sup>th</sup> century with the emergence of several of these institutions in cities across Europe (BENNETT, 2003). Thus, childcare services were developed under charitable purposes, while early education services were incorporated in a growing tendency towards the organization of public education services. According to Bennett and Kaga (2010), these dual historical pathways derived in services with different visions of young children and childhood, embodied in different, and often inconsistent,

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<sup>3</sup> Australasia is a term used to describe a geographical region in Oceania. It includes Australia and Aotearoa New Zealand.

<sup>4</sup> The SEEPRO-R provides a systematic review and analysis of the professional education/training systems of early childhood staff in 30 countries, placing these within the country-specific ECEC system and the wider socio-cultural context (OBERHUEMER e SCHREYER, 2018).

programme goals, contents and approaches. Bennett (2003) states that the parallel development of these two strands of early intervention was mirrored at the level of governance, configuring split systems in which the services for children under-three were located under the minister for social, family and health policy, and ECEC for children over-three were kept under the responsibility of the ministry of education. This dualistic background led to the current coexistence of two main models of ECEC organization: (i) a split system that structures ECEC services by age, in two phases<sup>5</sup>, the first integrating provision for infants and toddlers and commonly referred to as *childcare*, and the second phase encompassing services for older children, usually as part of the national education system; (ii) an integrated or unitary system, in which ECEC services for all children under-six years are arranged in a single phase with the governance of the ministry of education (EUROPEAN COMMISSION/EACEA/EURYDICE/EUROSTAT, 2014).

The existence of a split system in many European countries has been identified as having negative consequences for children under-three and their families. More specifically, a detrimental effect has been identified at the level of the access to services, with a legal entitlement usually benefiting older children (BENNETT e KAGA, 2010; EUROPEAN COMMISSION/EACEA/EURYDICE/EUROSTAT, 2014). Moreover, the shortage of services in many countries, and particularly in urban areas, drive working parents to seek solutions in the private market or rely on informal arrangements (BENNETT, 2003). As a consequence, ECEC services for children under-three became particularly vulnerable to two tendencies identified by Vandenbroeck, Peeters, Urban and Lazzari (2016): familiarisation (representing the growing number of childcare places organised by childminders or family daycare providers) and marketisation (meaning the encouragement towards private initiatives, with less or no funding from states). The OECD (2017) also refers that, besides being less developed and less affordable, there's a tendency for services for younger children to employ less qualified staff and have worse working conditions. In this respect, a clear link has been identified between the ECEC organisational model and staff qualification requirements. Thus, in integrated or unitary systems, the minimum qualifications requirements are the same regardless of the age of children, usually pushing forward the professional requirements and turning them higher in comparison with those from professionals working in B-3 contexts in countries with split governance systems (EUROPEAN COMMISSION/EACEA/EURYDICE/EUROSTAT, 2014).

In spite of the difficulties of radically rethinking zones of ministerial responsibility as well as traditional social representations and attitudes (eg.: towards child-rearing and the education of younger children) (BENNETT, 2003), a movement towards the integration of ECEC services at the level of governance and curricula has been identified in several European countries (OECD, 2017). One of the most recent examples comes from Italy, where the Law 107/2015 and Decree-Law 65/2017 foresee the institution of an integrated system of education from birth to six years, that includes the insuring of adequate initial professional training, with specific university-level training becoming the minimum mandatory requirement

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<sup>5</sup> In a split system, children typically make the transition between settings at the age of three, but it can vary across countries, from 2½ years to 4 years (EUROPEAN COMMISSION/EACEA/EURYDICE/EUROSTAT, 2014).

for all ECEC teachers (BOVE e CESCATO, 2018). Following the tendency registered above, the transition to an integrated system in the Italian context will also convey new demands for the initial professional studies for working in B-3 services as an educator: a bachelor's degree in educational science (early childhood education curriculum), or a five-year degree in primary and pre-primary education, followed by a 60-ECTS module in early childhood education (BOVE e CESCATO, 2018).

## Minimum qualification requirements

The analysis of policy documents and relevant data bases reveals a first evidence concerning the minimum qualification requirements for core professionals working with children up to three years: a notorious diversity across European countries (EUROPEAN COMMISSION/EACEA/EURYDICE/EUROSTAT, 2014; OBERHUEMER e SCHREYER, 2018; OECD, 2017). Oberhuemer (2011) states that, in this particular sector, there are widely divergent approaches both in terms of formal level of education/training and disciplinary orientation. As previously mentioned, a lower minimum level of qualification is usually required for working with babies and toddlers when comparing with core professionals that work with children over three years (EUROPEAN COMMISSION/EACEA/EURYDICE/EUROSTAT, 2014).

Table 1 presents the minimum length and minimum required level of IPS for core professionals working in centre-based services for children under-three and their families in several European countries.

Table 1 - minimum length and minimum required level of IPS

Country	Minimum length and minimum required level
Austria	2 years Post-secondary non-tertiary level (ISCED 4)
Belgium (fr; de; nl)	3 years Upper secondary level + 1 year specialisation or adult education (ISCED 4/5)
Bulgaria	4 years Bachelor's level (ISCED 6)
Croatia	3 years Bachelor's level (ISCED 6)
Cyprus	Compulsory school leaving certificate (ISCED 3)
Czech Republic	Provision for 2-year-old children: 4 years Upper secondary level (ISCED 3) Note: since September 2017, regular kindergartens are responsible

	for integrating 2-year olds. No specific qualifications for children under-two
Denmark	3 ½ years Bachelor's level (ISCED 6)
Estonia	3 years Bachelor's level (ISCED 6)
Finland	3 years Bachelor's level (ISCED 6)
France	3 years Bachelor's level (ISCED 6) OR 2-year vocational secondary school course “ <i>CAP petite enfance</i> ”
Germany	3 years Tertiary-level vocational technical college ( <i>Fachschule</i> ) (or technical academy ( <i>Fachakademie</i> ) (ISCED 6) OR 3-4 years at Fachschule and in ECEC setting (ISCED 6)
Greece	4 years Bachelor's level (ISCED 6)
Hungary	2 years Upper secondary level (ISCED 3)
Iceland	5 years Master's level (ISCED 7)
Ireland	Duration varies according to individual choice of practitioner Post-secondary non-tertiary level (ISCED 4)
Italy	5 years Post-secondary non-tertiary vocational education (ISCED 4) Required as from 2019/2020: Bachelor's degree in Educational Science, with a specific focus on early childhood education
Latvia	2 years Short-cycle tertiary education (ISCED 5)
Lithuania	3,5 years Bachelor's level (ISCED 6)
Luxembourg	4 years Post-secondary non-tertiary education (ISCED 4)
Malta	2 years Post-secondary non-tertiary level (ISCED 4)
Netherlands	3 years Upper secondary vocational course (ISCED 3 or 4)
Norway	3 years Bachelor's level (ISCED 6)
Poland	12 years schooling + 2 years of work experience (0-3 years) (ISCED 3)
Portugal	4,5 years Master's level (ISCED 7) [Note: a master level is required for working with toddlers since 2007. A compulsory school leaving certificate is the only requirement for working

	with infants]
Romania	4 years Upper secondary level (ISCED 3)
Russian Federation	3 years Post-secondary vocational qualification in the field of pedagogy and early childhood education (ISCED 4)
Slovak Republic	4 years Upper secondary vocational school, specialising in kindergarten, education and care or health care OR Upper secondary education ( <i>maturita</i> ) + 220 hours accredited course on child care (ISCED 3)
Slovenia	3 years Bachelor's level (ISCED 6)
Spain	2.000 hrs Post-secondary Diploma/Higher Technician in Early Childhood Education (ISCED 4)
Sweden	3 1/2 years Bachelor's level (ISCED 6)
Ukraine	3 (or 4) years Bachelor's level (ISCED 6)
UK (England, Wales and)	Public/maintained sector: Bachelor's degree with UK Qualified Teacher Status (ISCED 6)  Private, voluntary and independent sector: England, Wales and Northern Ireland: minimum qualifications are diverse, although 's a tendency to raise the basic requirements to level 3 Scotland: Scottish Vocational Qualification 3 in children and young people's services (ISCED 4 or 5)

Sources: European Commission/EACEA/EURYDICE/EUROSTAT, 2014; Oberhuemer e Schreyer, 2018.

From the 32 European countries with available data, 15 demand IPS at the level of tertiary education, setting the same minimum requirement level for core professionals working with children under and over three years. The majority of these countries have integrated or unitary systems. This is the case of the clusters from Nordic countries (Denmark, Finland, Iceland, Norway and Sweden), Baltic countries (Estonia, Latvia and Lithuania) and other countries such as Croatia, Slovenia, Ukraine (partially integrated) and the UK (in the public/maintained sector). From these data, it's possible to confirm the tendency stated in the previous section: that the integration of all early childhood services within education carries visible advantages in what concerns the minimum duration and level of IPS for working with children under-three. Exceptions to this tendency are Bulgaria, Greece and Portugal that, in spite of having split systems, demand the same minimum

tertiary education requirement for all ECEC core professionals. In Portugal, another exception concerns the policy for centre-based provision for babies. Indeed, the Portuguese law (PORTUGAL, 2011) stipulates, as a minimum requirement for working with babies, a compulsory school leaving certificate (corresponding to 12 years of formal schooling), while the minimum requirement for working with toddlers (12-36 months, approximately) is set out at the level of a master degree, since 2007.

Meanwhile, it's also possible to identify a group of countries in which the IPS are situated at the upper secondary level (ISCED 3), post-secondary non-tertiary level (ISCED 4) or even residual circumstances in which no minimum or specific qualifications are required. These are also the countries in which there is a more visible hiatus in IPS for working with younger and older children in ECEC settings.

From this cross-national analysis, it's possible to identify a very diverse and complex panorama in what concerns the IPS for working with babies and toddlers in the European scenario. Long and complex historical and cultural trajectories led to particular ways of conceptualizing and organizing the education and care services for these children and their families. Despite of this, a tendency has been observed for raising the minimum requirements in several European countries. Some of these initiatives will be presented in the next section.

## Recent policy reforms in the European space

ECEC has been a focus of interest in the European policy agenda over the last three decades. Whereas the first actions, particularly from the European Union (EU), were influenced by a “narrow employment-related prism” (COHEN e KORINTUS, 2017, p. 236), concerns with the access and quality of these services were gradually incorporated, mirroring the recognition of the pedagogical and social dimensions of ECEC provision, as well as children's rights. Workforce professional preparation has been one of the most salient areas of concern. A clear example draws from the development of the *Proposal for key principles of a Quality Framework for Early Childhood Education and Care*<sup>6</sup>, under the auspices of the European Commission (EC) (2014, p. 110) that established five core areas on the quality of ECEC provision at an European level: accessibility, workforce, curriculum, monitoring and evaluation, and governance and funding. In what concerns the ECEC workforce, this framework reinforces the need for “well-qualified staff whose initial and continuing training enables them to fulfil their professional role”, emphasising the substantial evidence on the nexus between higher levels of initial preparation and specialised training, and

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<sup>6</sup> In 2011, the EC launched a process of cooperation and reflection on the access and quality of ECEC provision, in response to requests from Member States. The development of the key principles included the establishment of a Thematic Working Group (TWG) composed by experts from Member States and stakeholders, and the use of the Open Method of Coordination. Through it, the members “exchange and synthesise their policy experiences, analyse and compare policy options, draw on research about successful policies and make recommendations for good policy practice. These are offered as guidance for national policy makers and practitioners.” (European Commission, 2014, p. 6).



ECEC quality, staff pedagogy and children's outcomes (EUROPEAN COMMISSION, 2014). More recently, a panel of experts issued a set of indicators for monitoring the quality of ECEC (EUROPEAN COMMISSION, 2018) being one of them the need for attention to the percentage of staff that completed professional education relevant to their role in an ECEC setting, with the recommendation to consider, in this indicator, the staff who work with children under and over the age of three.

In spite of critics over the *Europeanisation* of the education policy space and the risk to pay insufficient attention to system-specific factors and contexts (MILOTAY, 2016), the need to upgrade the level and relevance of ECEC workforce preparation seems to remain uncontroversial, either at European and national levels. This led to initiatives in some European countries in order to address this specific concern regarding core professionals that work with children under-three, in cases in which IPS are not yet situated at a tertiary level. This is the case of Austria, in which curricular reform undergone in the vocational colleges of early childhood pedagogy in 2016 stipulated “that all Austrian Kindergarten Pedagogues should acquire the necessary competencies for working professionally with under 3-year olds during their initial professional studies” (KRENN-WACHE, 2017, p. 15). Also in Belgium, in the Flemish Community, a new decree on childcare for birth-to-3-year olds (*Decreet Opvang van baby's en peuters*) was implemented, continuing the work of the Flemish government initiated in early 2009 to take structural and legislative measures concerning childcare (including B-3 and out of school care). This legal framework stipulates, since April 2014, that every person working in this profession has to have some type of qualification by 2024, through one of the available qualification routes (PEETERS et al., 2018).

As stated before, deep changes in ECEC politics are currently being implemented in Italy, deriving from the transition of a split system into an integrated system. As referred by Bove and Cescato (2018), this means to bring together all ECEC entities under *shared standards of acceptability in terms of infrastructure, organisation and quality* (p. 616). Particularly noteworthy, considering the aims of this article, is the upgrading of preservice education of B-3 educators to a relevant university degree, for the first time at a national level (BOVE e CESCATO, 2018).

In Portugal, changes in law occurred in 2014 with the Decree-Law 79/2014 (PORTUGAL, 2014) that constitutes a revised version of the Decree-Law 43/2007, February 2014, that laid down the requirements for initial teacher education within the fundamental changes brought about by the Bologna Process. Considering Decree-Law 79/2014, together with Order n. 262/2011 (PORTUGAL, 2011), early childhood teachers working with toddlers need to be qualified at a Master level. Decree-Law 79/2014 also stipulates the increase of the duration of the professional master's programme in one semester. In spite of this high level of qualification, some fragilities have been identified in IPS of early childhood teachers in the post-bologna model: (i) as stated before, while the minimum requirement for working with toddlers is set out at a master level, the minimum requirement for working with babies continues to be a compulsory school leaving certificate, with no specific preparation required; (ii) the master course descriptor (Master in Pre-School Education) does not integrate the B-3 sector, once the term “pre-school education” corresponds, according to

the Portuguese Education Act, to the provision for children from 3 years up to primary school age; (iii) in spite of the previously mentioned aspect, the entity that formally evaluates and accredits higher education courses in Portugal has been emphasising the need to reinforce the education/training of educators for working in infant/toddler centres, which creates a certain degree of inconsistency between requirements from different entities (ARAÚJO, 2018b).

Several reforms on the IPS of professionals working in the childcare are also under way or under debate in France (RAYNA, 2018). The challenges in this country are quite considerable because the majority of workers have low-level IPS and because of the medical background of the sector. Nonetheless, discussions on the length (in the case of *CAP petite enfance*), organization (in the case of *éducatrices*) and content of the studies (for *puéricultrices*) are taking place, even if not yet addressing the identified and significant gap between childcare and education professions (RAYNA, 2018).

Finally, also in Slovakia new regulations for the operation and management of settings for children under-three, including professional qualifications, were set in 2017. According to Baďuríková, Šimčáková and Renčíková (2018), while until the end of 2016 no official minimum qualification was required on this profession, as from March 2017, at least 75% of all staff working in ECEC settings for children under-three needs to have completed 4 years of specialised upper secondary vocational school or, alternatively, have completed upper secondary education and 220 hours accredited course on child care (cf. Table 1).

Analysing these recent policy initiatives, it can be reiterated that they mirror country-specific contexts and the diversity that characterises the European space. As Oberhuemer stated (2011), even if it's possible to identify in some countries a motivation to upgrade the level and relevance of the qualification requirements, the starting-points are very diverse. This also means that dialogue and cooperation on different and successful experiences across this vast continent could constitute an inspiration and impetus for a continuous improvement for this particular profession.

## **Australasian trends in the professional preparation for working with children under-three**

### **Governance and its influence at the level of minimum qualification requirements**

In Australia, kindergartens and preschools are funded by state governments, and childcare centres are funded by the federal government. National reforms in early childhood education were introduced in 2008 attempting to raise the level of quality care and education. This included introducing a national early childhood framework (DEPARTMENT, 2009), the National Quality Framework, which includes national laws related to early childhood care and education, and the National Quality Standard, which focused on increasing qualification standards (SUMSION, 2017). Recently, Sumsion (2017) described early childhood education as being a low status 'soft' portfolio for the Australian federal government.

In Aotearoa New Zealand, all early childhood education, including parent-led playgroups, are governed by the Ministry of Education. National reforms in early childhood education were introduced, and international early childhood history was made when the government shifted early childhood policy in 1986 from the Department of Social Welfare to what was then known as the Department of Education, now known as the Ministry of Education (DALLI e MEADE, 2010).

In spite of having integrated systems (with many responsibilities that are decentralised in Australia), a sociohistorical divide between care and education persists and is reflected in the differences between qualification levels and age groups of children (under and over three years) (LI, NYLAND, MARGETTS e GUAN, 2017).

## **Minimum qualification requirements**

Typically, adults working with infants and toddlers in Australia are called ‘educators’, and do not have degree-level early childhood qualifications, this maintains qualifications-based hierarchies between age groups that educators work with. Instead, the majority of infant and toddler educators in Australia have obtained one of two vocational qualifications provided by vocational early childhood providers. These are the Certificate III in Children’s Services - this typically takes six to seven months full-time study to complete, and the Diploma of Children’s Services, which typically takes eighteen months full-time to complete. The Certificate III qualification has been a source of contention in Australia with many academics and experts in the early childhood field claiming it does not provide adequate training for the complexities of work with very young children (LI et al. 2017). The majority of degree-level qualified early childhood education teachers work with children aged three and above.

In Aotearoa New Zealand, recognised early childhood qualifications are at a degree-level, rather than the three-tiered levels of recognised qualifications in Australia. However, there is a greater prevalence for unqualified educators, or pre-service teachers in training, in Aotearoa New Zealand to work with infants and toddlers, while qualified teachers are more likely to work with children three and above.

The stark differences between the levels of qualifications between Australia and Aotearoa New Zealand are important to acknowledge.

## **Recent policy reforms in the Australasian space**

Recent federal government policy decisions in Australia have maintained lower levels of status for childcare educators and teachers. With serious tensions raised with the release of the Australian *Early Childhood Development Workforce: Productivity Commission Research Report* (PRODUCTIVITY

COMMISSION, 2015a, 2015b). The Productivity Commission is the Australian Federal Government's principal review and advisory body. They review and advise about microeconomic policy, regulation, and a range of other social and environmental issues in Australia. The draft report released to the public (PRODUCTIVITY COMMISSION, 2014) received considerable backlash from the early childhood community in Australia. This backlash was due to the draft report's communication that "the evidence that specific levels of qualifications improve the learning and development outcomes for children under three years of age is absent and evidence of positive impacts of qualifications, by themselves, is inconclusive" (PRODUCTIVITY COMMISSION, 2014, p. 264). This report has reinforced struggles to professionalise the early childhood workforce in Australia, particularly for educators who work with infants and toddlers.

Positive policy reform for children in Australia was the change in ratios for children aged 2-3 years from January 2016. Ratio requirements for Australia are now: birth to 2 years 1:4 (all states/territories), 2 to 3 years 1:4 (Victoria) and 1:5 (all other states/territories), ages 3 to 5 differ for each state—ranging from 1:10 to 2:25 (this depends on the type of early childhood care and education offered) (WHITE et al., 2016).

In Aotearoa New Zealand the policy that had most significant impact in the last 20 years on children aged birth to three years was the 10-year strategic plan, *Pathways to the Future: Ngā Huarahi Arataki*, commonly known as the Strategic Plan (MINISTRY OF EDUCATION, 2002). This was noteworthy due to the commitment, and goal of 100% qualified teachers to work with all age groups of children. However, a change in government in 2009 led to significant unravelling of the strategic plan, and the target was reduced to 80% qualified teachers overall, with 50% of qualified teachers working with children birth to two (DALLI, 2017). Legal ratio requirements are much higher in Aotearoa New Zealand: under 2s 1:5; over 2s 1:6 then 2:7–20 (Schedule 2: substituted, on July 1, 2011, by regulation 14 of the Education (Early Childhood Services) Amendment Regulations 2011) (WHITE et al., 2016). However, many early childhood settings maintain lower ratios with children, particularly aged birth to two years.

## European and Australasian trends: a comparative analysis

The comparative exercise that was carried out considered the three aspects that guided the characterization presented above. Thereby, at the level of governance, some differential tendencies can be identified. As already referred, in European countries that have an ECEC integrated or unitary system, the core professionals tend to have higher qualifications, i.e., the same tertiary-level qualifications than those that work with children over-threes. This means that, in the European context, sociopolitical decisions around ECEC organization tend to have a direct impact in raising the level and duration of IPS. In Australasia, this tendency is not clear. Albeit the two countries have integrated systems (although in Australia many responsibilities are decentralised) this doesn't seem to have a substantial impact in leveraging the professionals' qualifications in Australia. As for Aotearoa New Zealand, considered a forerunner in what concerns the

transition to an ECEC integrated system (BENNETT e KAGA, 2010), the results in what concerns the upgrading the qualifications of all ECEC staff were positive, although professionals working with infants and toddlers are more likely to remain unqualified, as mentioned above.

In what concerns minimum qualification requirements, wide diversity characterizes IPS across Europe and Australasia. In Europe, a very composite scenario is observed that includes countries that still don't have minimum qualification requirements, such as Cyprus, Czech Republic (no specific qualification for working with under-2) or Portugal (no specific qualification for working with infants) and countries that require a Master level, such as Iceland and Portugal (for working with toddlers) (cf. Table 1). In Australasia, differences also subsist, with a degree-level required in Aotearoa New Zealand and a vocational qualification demanded in Australia. Australian educators who work with infants and toddlers are often younger and paid less with lower-levels of qualification. In Australia, if government policy does not mandate the employment of degree-level qualified teachers to work with children under three, then pre-service teachers are far less likely to work with infants and toddlers (IRELAND, 2007; NOLAN e ROUSE, 2013; ROUSE, MORRISSEY e RAHIMI, 2012).

Wide variations in what concerns infant and toddler curriculum and pedagogy content in IPS were also identified. For example, literature from Australia and Aotearoa New Zealand on this issue argues there is a contemporary struggle to include infant and toddler curriculum and pedagogy content (GARVIS e LEMON, 2015; GARVIS e MANNING, 2015; IRELAND, 2007; NOLAN e ROUSE, 2013; ROCKEL, 2013; ROUSE et al., 2012). In Australia, infant and toddler curriculum and pedagogy have received meagre consideration in IPS (GARVIS e LEMON, 2015; GARVIS e MANNING, 2015; RECCHIA e SHIN, 2010). Generally, early childhood teacher education and IPS in Australasia asserts that content covers a wide-range of ages (SUMSION et al., 2009), typically from birth to eight, but the focus is least on children under three (RECCHIA e SHIN, 2010).

Finally, recent policy initiatives in Europe targeted IPS, mirroring the motivations of some States to qualify the profession through the professional preparation of staff, both at level and content. However, as clarified above, this is not uniform across the continent. Moreover, the last decade was characterised by a severe economic crisis and austerity measures, particularly in Southern European countries, that represented a retraction at the level of public investment in the ECEC sector and a contingent rise of the private sector, particularly in B-3 centre-based services. In Australasia, some challenging circumstances are to be referred, namely the report of the Australian Productivity Commission that represented a drawback on the professionalization of educators who work with infants and toddlers and left the profession vulnerable for further marginalization (WHITE et al., 2016).

## Conclusion

The focus on the IPS for working with children under-three both in Europe and Australasia revealed a wide diversity, that is not dissociated from socio-historical-cultural backgrounds, in which the division of “care” and “education” mirrored binary visions and approaches on children’s upbringing. Overall, the analyses carried out allowed possibilities to identify a more visible investment on the workforce professionalization, but still far from a truly equitable approach. In fact, it seems possible to assert that the younger children are, the more diverse, disarticulated and unprepared the ECEC systems seem to be in order to address their specific education and care needs.

According to Havnes (2018), early childhood teachers are, within the ECEC system, the weak element in two hierarchies, the governance hierarchy and the epistemological hierarchy. From our study, professionals working in the B-3 sector are the “weakest of the weak” and are tendentiously maintained in a subsidiary position. Rayna and Laevers (2011) argued for “a continuous process of emancipation and empowerment of the under 3s sector in education” (p. 163) in which IPS plays an influential role. In this context, further studies are needed in order to address the infant and toddler curriculum and pedagogy in IPS, i.e., the relevance of qualification requirements and their alignment with the specific professionalism for working with children under-three. This constitutes a contemporary challenge in different parts of the world that must be inscribed in a much needed collective (ethical) commitment towards the education and care of our younger citizens.

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