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Pedagogical Documentation in the Era of Digital Platforms: Early Childhood Educators' Professionalism in a Dilemma

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Abstract: The so-called logic of datafication and platformisation, as a consolidated business model for the BigTech industry with applications to education (van Dijck et al., 2018), can also reach (and affect) early education and care. In a kid's culture that values documenting and sharing with parents, social media and instant messaging are widely used. Educators feel overloaded with the challenges posed by digital platforms, but contextual issues are relevant to finding ways for resistance and engagement in political actions to transform the edtech platforms' dominance. Investigating the specific discourses and approaches to platformisation from early education professionals appears relevant to promoting not only awareness but also ways to rethink professional and political agency. Our preliminary study is based on 14 individual

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interviews and one group interview with educators in the Italian region of Veneto. The results of our thematic analysis indicate that achieving a balance between technology-based documentation and children's privacy is not straightforward. Also, educators are calling for policies and further support for technology-driven services and activities that make thoughtful and conscious use of technology to avoid harming children. On these bases, we advance recommendations to deepen early childhood educators' professional development requirements in a data-driven and post-digital society.
Keywords: platformisation; early childhood education and care; educators; documentation

Documentación pedagógica en la era de las plataformas digitales: El profesionalismo de los educadores infantiles en un dilema

Resumen: La denominada lógica de la datificación y la plataformización, como modelo de negocio consolidado para la industria BigTech con aplicaciones a la educación (van Dijck et al., 2018), también puede alcanzar (y afectar) a la educación y atención tempranas. En una cultura infantil que valora documentar y compartir con los padres, las redes sociales y la mensajería instantánea se utilizan ampliamente. Los educadores se sienten sobrecargados con los desafíos que plantean las plataformas digitales, pero las cuestiones contextuales son relevantes para encontrar formas de resistencia y compromiso en acciones políticas para transformar el dominio de las plataformas edtech. Investigar los discursos y enfoques específicos de la plataformización por parte de los profesionales de la educación infantil parece relevante para promover no sólo la concienciación, sino también formas de repensar la agencia profesional y política. Nuestro estudio preliminar se basa en 14 entrevistas individuales y una de grupo con educadores de la región italiana del Véneto. Los resultados de nuestro análisis temático indican que lograr un equilibrio entre la documentación basada en la tecnología y la privacidad de los niños no es sencillo. Además, los educadores reclaman políticas y más apoyo para los servicios y actividades basados en la tecnología que hagan un uso reflexivo y consciente de la tecnología para evitar perjudicar a los niños. Sobre estas bases, avanzamos recomendaciones para profundizar en los requisitos de desarrollo profesional de los educadores de la primera infancia en una sociedad postdigital e impulsada por los datos.
Palabras clave: plataformización; educación infantil; educadores; documentación

Documentação pedagógica na era das plataformas digitais: O profissionalismo dos educadores de infância num dilema

Resumo: A chamada lógica da datificação e da plataformização, enquanto modelo de negócio consolidado para a indústria BigTech com aplicações na educação (van Dijck et al., 2018), também pode atingir (e afetar) a educação e o acolhimento na primeira infância. Numa cultura infantil que valoriza a documentação e a partilha com os pais, as redes sociais e as mensagens instantâneas são amplamente utilizadas. Os educadores sentem-se sobrecarregados com os desafios colocados pelas plataformas digitais, mas as questões contextuais são relevantes para encontrar formas de resistir e participar na ação política para transformar o domínio das plataformas edtech. A investigação de discursos e abordagens específicos à plataformização por parte dos profissionais de educação de infância parece relevante para promover não só a consciencialização, mas também formas de repensar a agência profissional e política. O nosso estudo preliminar baseia-se em 14 entrevistas individuais e uma entrevista de grupo com educadores da região de Veneto, em Itália. Os resultados da nossa análise temática indicam que não é fácil encontrar um equilíbrio entre a documentação de base tecnológica e a privacidade das crianças. Além disso, os educadores apelam a políticas e a um maior apoio a serviços e actividades de base tecnológica que façam uma utilização ponderada e consciente da tecnologia para evitar prejudicar as crianças. Nesta base, apresentamos recomendações para aprofundar os requisitos de desenvolvimento profissional dos educadores da primeira infância numa sociedade pós-digital e orientada para os dados.

Palavras-chave: plataforma; educação de infancia; educadores; documentação

Pedagogical Documentation in the Era of Digital Platforms: Early Childhood Educators' Professionalism in a Dilemma

In what Cheney-Lippold (2017) called "*ius algorithmi*," the common citizen's interaction with interfaces offering products and services of their interest becomes valuable raw material for Big Tech companies (p. 157). In this context, there is an exponential growth of data extracted and monetised (van Dijck et al., 2018). This logic has also impregnated educational practises, addressing educators' and learners' understanding of teaching and learning through the progressive adoption of platforms' free services and features (Williamson et al., 2020).

The protection of children's rights can be connected to quality educational spaces since education is a right in itself. In this regard, in 1989, the United Nations Convention on the Rights of the Child (1989) generated a crucial space for childhood and children's voices, learning, and protection. As a result, monitoring the implementation of the recommendations made by the United Nations (UN) has become increasingly essential, with states being required to report to the UN every four years (e.g., *5th and 6th UN Reports on Childhood and Adolescence in Italy*; National Centre, 2019).

However, international and national efforts are still struggling to conceptualise and fight against the Internet's impact on children's rights, focusing instead on rights to provision, such as Internet access, or protection from potentially detrimental experiences, such as cyberbullying or pornographic exposure (Swist & Collin, 2017). Several studies have demonstrated that educators display different attitudes while using social media and educational platforms. While some might feel enthusiastic and careless about privacy issues or data justice, others feel overwhelmed and hopeless in the face of datafication and platformisation, as they see themselves as part of something they do not necessarily agree with or, even worse, do not have the right skills or knowledge to deal with this complex phenomenon (Fontichiaro & Johnston, 2020; Raffaghelli, 2022).

In such a context, we posit that it is crucial to understand the degrees of agential freedom that early childhood education and care (ECEC) professionals experience[1] in relation to digital transformation overall and the specific phenomena of datafication and platformisation crossing their experience (Mascheroni & Siibak, 2021; Swist & Collin, 2017). As it has been purported in studies with school education, educators play a key role in questioning the naturalisation of platforms and their business models, making private interests dominate the public sphere of education (Jacovkis et al., 2022). A distinctive issue at this level, though, is the relevance given to documenting the children's experiences and activities to share them with their families (Falco & Kishimoto, 2022; Malaguzzi, 1998). Documentation has been defined as the process of gathering and using all forms of educational activity and production to narrate early education to the community (Malaguzzi, 1998). It has become a symbol for utopian early childhood programmes and has been practised in the last 30 years globally, starting with the birth and success of the Reggio Emilia Approach (later adopted by the Reggio Children Foundation; Alaçam & Olgan, 2021). Policy making and educators' support for professional practice highly recommend this practice since "rich documentation incorporates multiple perspectives and makes learning visible to the learning community" (Australian Government Department of Education, Department of Employment and Workplace Relations, 2010, p. 37). And though documentation initially

[1] The term *ECEC services* will be used to identify facilities involved in the education and care of children from 0 to 6 years old in Italy's so-called "integrated education system 0–6 years old." The integrated system includes 0–3-year-old children and pre-school children (3–6 years old). The term *educator* will be used to identify the professional engagement in ECEC services, and *teacher* in relation to pre-school.

intended artwork, pictures, children's records, and transcriptions of key learning moments to share with families, both educators and families might be tapping into social media and other educational platforms to carry out their documental journeys. One relevant assumption is that if educators as professionals feel competent to understand the forms into which platformisation and datafication may be entangled in documentation (amongst other educational activities in ECEC), they will be able to protect children's rights. Their action is based on cautious adoption, requests for further information, and resistance or engagement in political and institutional action, which in time lead to contesting the power and control exerted by platforms in their practise. Most importantly, their agentic political engagement might be a relevant part of their professionalism to approach the social construction of spaces where children's rights to quality education are defended.

Background

Datafication and Platformisation: From Society, to Education, to ECEC

The impact (and, particularly, harm) of datafication on learners has been conceptualised hand in hand with the broader discussion in social research about data justice. Issues that have been explored include the impossibility of capturing minorities' features in the definition of "desirable" behaviours, the oversimplification of the learning process and how it is understood by the same teachers and learners, and the de-professionalisation of teachers' interventions in class, since their creativity is limited by a handful of predictable gestures (Gleason & Heath, 2021; Perrotta et al., 2020; Selwyn, 2021). The case of Google has been particularly well studied. For example, Saura et al. (2021) have spotted that "Google is the corporation that is leading the (so-called) educational innovation" through educational digital platforms that base their approach on rentiership (p. 112). Also, Amazon services have been criticised for an approach that, unlike Google, appears to offer subsidiary services like cloud storage space for learning management systems, thereby allowing them to control or sort data that can be extracted and shared with third parties (Williamson et al., 2022). Another feature of this phenomenon is the promise of metrics, which will relieve educators from the burden of transcribing, converting, and using data to understand the learning process (Perrotta et al., 2020; Saura et al., 2021). This is not to mention the impacts of social media platforms openly used by families and young people, frequently linked to school activity in several forms, where there has been a plea to address media literacy to prevent toxic effects (Livingstone et al., 2018). The pandemic accelerated this problem exponentially, generating a scenario where digital platforms offered their services "for free" as a facilitator for troubled families and teachers to roll out emergency remote education "solutions" (Williamson et al., 2020). But the concern increases when considering extremely young people, since they are unable to make any decisions about the type of devices and tools through which their lives are captured and circulated even before they are born (Barassi, 2020). The idea of reading childhood as a bio-coded period of life in which genomic, neural, and cognitive predictions are blended with computational big data studies is tightly connected to the type of services offered by apps to parents and educators (Lupton & Williamson, 2017). Indeed, with the decreasing birth rates in the Western world and particularly in Italy, families and educational institutions are focused on (and almost obsessed with) understanding, controlling, and reaching the best results in their parental and educational roles. This situation often ends in an indiscriminate adoption of platforms that promise easy data tracking and visualisation supporting good decision-making about the child's health, education, and social life (Barassi, 2017).

In this regard, the literature offers a relevant effort to conceptualise how such phenomena could impact children's rights. After a mixed-methods research study involving six interviews with educational leaders and 2,112 families' responses to a survey, Jacovkis et al. (2022) concluded that there are evident conflicts linked to the need to be part of a "post-digital"

society in which critical approaches to the use of platforms are seen as minoritarian and undermining personal freedom. The families and the educators are aware, to some extent, of the superficial features of edtech business models (Carpenter & Harvey, 2019). Teachers and learners can also understand that data can go everywhere (Pangrazio & Cardozo-Gaibisso, 2021). And they see the fact that the metrics adopted could constrain their practise and freedom to act in the educational space (Selwyn, 2021). Nonetheless, educators feel that protecting one child's right (to privacy) might impose limitations on the children's access to knowledge and future opportunities to take an active part in a society where the rulers are industries like BigTech companies (Pangrazio & Selwyn, 2020).

Aligning with recent research on datafication in education at all levels, we can consider here the expression of socio-technical assemblages (Knox, 2017; Selwyn, 2015), which spot the extreme entanglement of digital infrastructures with social and cultural factors that promote their creation and usage. Exploring such structures would open "the black box of data practices in the field of education" (Decuypere, 2021, p. 68). We might apply such a perspective to ECEC, investigating how the tradition of pedagogical documentation, as a driver of early education quality, is affected by digitalisation and, hence, platformisation.

As we purported, there is an overwhelming presence of commercial platforms, which are designed infrastructures that determine the collection of data points and shape data practises overall in the educational system (Perrotta et al., 2020; Saura et al., 2021). But in the case of childhood, the apps are even more entangled with private life and the parent's choices (Mascheroni & Siibak, 2021). Families and ECEC services are indeed overwhelmed with commercial apps to track pregnancy and the first year of life, to stimulate cognitive and motor development, to support nutrition, to better administer communications between the ECEC service and families, and so on (Barassi, 2017). In this regard, and despite the well-known work of sociologists working in the field of social media (Mascheroni & Siibak, 2021; Livingstone et al., 2018), educational research has not yet focused on how an increasingly digitalised pedagogical documentation might affect educators' agency in providing quality education as a key children's right.

> At this point, we draw on Swist and Collin (2017), for whom:
>
> > children's rights should be explored in terms of (a) range of socio-technical encounters that inform wellbeing. Specifically, how are children's rights constituted via platforms (digital intermediaries) and enacted in relation to people and places (social and spatial intermediaries)? This acknowledges the role of context and that children's experiences differ markedly around the world. (Swist & Collin, 2017, p. 672)

Although the home is an important setting for young children's first experiences with technology, recommendations to engage children in early education open them to new spaces of technological exposure. In this regard, educators play a relevant role as specialised professionals accompanying children in progressively participating and expressing their perspectives as rights' beholders. Not only do they share the spaces where the children might spend a relevant part of their lives, but they also mediate the entrance and adoption of platforms in such spaces and are expected to support parents' behaviour in dealing with media consumption within the private space (Mascheroni & Siibak, 2021). Indeed, professional early education has been considered crucial to supporting children's equal opportunities and success in future academic outcomes (Ulferts et al., 2019). Documentation, as a professional practise and a key part of educators' professionalism, has had a significant impact on children's rights. Therefore, the practise of documentation has been largely considered a vector of children's and families' well-being. The way platforms enter the scene of pedagogical documentation has a plethora of implications for children and their right to a qualified educational service, beyond their right to privacy and right to make choices about their identities in the future, we argue. However, in a culture of ECEC

where, building on the experience of Reggio Emilia Approach, documentation and sharing with parents is highly relevant, the educators might feel overwhelmed by the conflicting motivations and concerns emerging while using platforms as reported for other levels of education (Raffaghelli, 2022).

Documentation, Technologies, and the Educator's Professionalism

Attention to documentation processes dates to the Reggio Emilia Approach, a cultural project based on the concept of a child with high developmental potential and rights who learns and grows in relationship with others. Due to the conviction that a child's knowledge is socially constructed, documentation assumes an important role in the work of educational service providers. This premise necessitates the development of democratic and reflexive pedagogical practises (Dahlberg et al., 2007) that allow all those engaged in educational activities to assume responsibility for the definition of meanings and decisions pertaining to practises (De Rossi & Restiglian, 2013).

This is a deliberately subjective and partial perspective derived from context, but it can still provide meaning and significance to the experiences constructed by the children. As a result, there is increased visibility of children's learning paths and processes (Giudici et al., 2011; Tan & Yang, 2022), enabling, among other things, the child's subjectivity and particularities to manifest. Also, there is a relevant message to the community about childhood and children's life (and their rights to be part of such a community).

Yet, documentation is one of the founding aspects of assessment in ECEC, along with observation. In this educational context, it has a much broader function than the individual child's assessment based on standardised instruments. Moreover, it is an essential practise for the implementation of educational planning and for the educator's self-assessment. In this regard, documentation supports educators rethinking their role and identity within a given ECEC service and territory. The evaluative and formative functions of documentation are, therefore, thoroughly integrated into early childhood education professionalism (Buldu & Olgan, 2021). These functions are accompanied by the communicative purpose—namely, informing families about the children's daily activities—and the administrative function, which is associated with the legal obligations that each ECEC service must meet.

Interpreting and making activities and experiences with children comprehensible, transparent, and understandable is a crucial aspect of documentation. Moreover, if we assume that each child has unique abilities, displayed through unrepeatable learning patterns, documentation is a strategy that records the children's progress and achievements (Wortham, 2012), serving the assessment purpose in a non-invasive way.

Documentation also allows the adult to reinterpret educational practises and to better understand the child (or group of children), allowing the educator to reconsider assumptions while developing pedagogical actions and making implicit "knowing" explicit (Niemi et al., 2015).

The implementation of pedagogical documentation as part of the educators' professional development is hence deemed essential (Buldu & Olgan, 2021). It is particularly well connected with a reflexive practise, triggering the analysis of processes, highlighting results achieved, or generating a memory of experiences and also strategies to rework individual and group interventions. In addition, documentation allows children and adults (both educators and parents) to relive their experiences, highlighting the complexity of their development and facilitating analysis and synthesis. The attribution of meanings by an adult differs naturally from that of a child and can acquire greater depth for the advancement of professional learning (Harcourt & Jones, 2016). Beyond the transmission of information on educational practises and children's learning styles (Rintakorpi et al., 2014), the connection with parents becomes fundamental to the institutional value of documentation to build relationships between the ECEC service, families, and the child (McLean, 2019; Pandini Simiano, 2022).

Documentation has broader implications. Listening, acknowledging, and giving meaning to children's experiences via documentation of their learning processes implies inviting them into a community of adults and children who value acceptance, inclusion, and involvement (Falco & Kishimoto, 2022). Documentation improves stakeholder openness, planning, and quality (Picchio et al., 2014).

Documentation requires considerable time and resources. If pedagogical documentation means what has been described thus far, then conducting documentation processes requires believing in its value and finding ways and strategies to have the leisure to do so, which affects the structure's organisation (Knauf, 2020). Following the path of the Reggio Emilia Approach to education, embraced partially or totally by other Italian experiences, pedagogical documentation is characterised by its qualitative nature and, consequently, by the narration and understanding of educational practises, which are expressed in a particular way through written notes and captions (by educators), graphics and images that are translated into daily logs, periodic journals, narrative notes and observations, wall panels, portfolios, and video recordings.

Clearly, judgements made regarding the compiled material must be based on a continuing selection connected to documents' relevance to the child's learning trajectory, the educators' design of pedagogical interventions, teamwork, communication with the families, and the ECEC service identity. Consequently, it is impossible to convey every daily occurrence in an educational setting. The educator must be able to "capture the moments" of young children's explorations and the value of "stretched time" through the pedagogical documentation process (Carlsen & Clark, 2022, p. 209). Digital media can facilitate this burden by providing features that allow the educator to take and share pictures of key moments or to document their ideas and expectations through fast voice recording and instant messaging. Moreover, specific apps promise to facilitate such a task with specific features. However, while adopting such features to document, the educators will fully enter the dimension of platforms and data capture (Barassi, 2020). Therefore, the educators' dispositions and imaginaries toward data practises are connected to competing ideologies heralded by actors such as the market, developers, and technologists as well as the public space between the government and civil society (Raffaghelli, 2022). ECEC educators' approaches to digital transformation overall, and toward the effects of platformisation and datafication specifically, should be explored to uncover conflicting discourses around platforms and apps, unethical practises, parents' digital and data literacy, and children's exposure to harmful datafication. An active and critical approach to datafication and platformisation by ECEC educators, as at other educational levels (Pangrazio & Cardozo-Garbisso, 2021; Raffaghelli, 2022), could be a vector to protect children's rights. Moreover, liaisons to rethink pedagogical documentation (and particularly digital documentation) could be proposed.

Methodology

From the background analysis, we considered two main research questions:

- RQ1: What are the ECEC educators' practises relating to documentation, and how are these influenced by the availability and usage of social media and educational platforms?
- RQ2: What are the ECEC educators' positionings and concerns relating to such practises?

The questions were established based on the notion that experience is a subjective engagement with technology that elicits inner values and reflections, thereby moulding the intentionality of human behaviour (Gallagher, 2014). In particular, our study's methodological foundation is the phenomenological comprehension of the educator's human and professional experience with platforms entangled in their daily activity. Experience involves taking action and imparting significance within the context of life and its objects. Educators' engagement with and

understanding of tools cannot be considered only from the perspective of an ideal user experience, or with recommendations from current legislation. Instead, the digital platform must develop a human experience that entails reflection and insight, expanding the degrees of freedom experienced in shaping a contextual practise. This can later foster agency and creativity at the personal, institutional, or community level, building a "bigger picture" (Raffaghelli, 2022). This is, according to us, aligned with the politics of a "culture of childhood" as envisaged in the Reggio Emilia Approach.

Data Collection

During a preliminary pre-service training for ECEC educators during the academic year 2021–22 at the University of Padova, a rather chaotic situation emerged regarding understanding, using terms for, and adopting positions related to the uses of documentation technologies. Two authors, who were co-teachers in the course, collected 107 students' opinions on the issue and explored ideas through a three-day lab. After the exercise, the group considered the need to investigate the educators' experiences through a panel of interviews. A snowballing technique (Daniel, 2011) was applied to identify educators interested in contributing to the study. Each interview was planned while taking into consideration theoretical saturation (Daniel, 2011)—namely, reaching at least one educator covering all the possible characteristics of the Veneto territory: type of early childhood education service, province, educator's experience and education, dimension of the town where the service is placed, and type of funding. Each characteristic represented the diversity of services and could have implications for the educators' positionings and experiences. Thus, the participants were self-selected and engaged voluntarily with the activity according to the requirements defined by the ethical guidelines of the University of Padova and the Department of Philosophy, Sociology, Pedagogy, and Applied Psychology. The interviews were conducted online using the videoconferencing system Zoom and recorded with the educator's consent, except for three interviews that were conducted face-to-face per the educators' choice. Table 1 displays the group of participants' characteristics.

Table 1

Profile of the Interviewees

Case	Age	Province	Town dimension	Education	Professional expertise quan	Professional expertise qual	Funding
ABB	<25	Venice	Small	A	1–2 years	Junior	Private
AC	31–35	Vicenza	Small	B	5–10 years	Leader	Private
AM	36–40	Rovigo	Big	C	1–2 years	Junior	Private
AMU	31–35	Padova	Small	B	5–10 years	Senior	Mixed-Religious
BG	41–45	Padova	Big	D	5–10 years	Senior	Mixed-Religious
CS	41–45	Rovigo	Small	B	11–20 years	Expert	Public
FM	41–45	Padova	Big	E	> 20 years	Expert	Mixed-Religious
IR	46–50	Padova	Small	A	> 20 years	Leader	Mixed-Religious
KP	26–30	Belluno	Small	A	> 20 years	Leader	Public
LB	>55	Treviso	Big	E	> 20 years	Expert	Public

Case	Age	Province	Town dimension	Education	Professional expertise quan	Professional expertise qual	Funding
LG	31–35	Padova	Small	C	5–10 years	Senior	Public
MS	36–40	Vicenza	Small	A	> 10 years	Leader	Public
PZ	26–30	Padova	Small	A	5–10 years	Senior	Mixed-Private
SS1	41–45	Padova	Small	A	> 20 years	Leader	Mixed-Religious
SS2	41–45	Friuli-Venezia Giulia	Big	B	> 20 years	Expert	Private

Data Analysis

The interviews were transcribed adopting an automatic tool (NVIVO transcription) and later revised by three researchers. The interview transcripts were analysed using NVIVO software. Thematic analysis (TA) was later applied with a mixed deductive and inductive approach (called codebook TA by Braun & Clarke, 2019). Over these bases, a set of codes was derived from the interview guide, which was composed of the following seven questions:

- Q1: Interviewee's profile, including age, pre-service education, professional experience, the type of experience (including specific projects and leadership of ECEC services), the province and city where the ECEC service operates, and the funding received, defining the public, private, or mixed nature of the service
- Q2: The ECEC service, including the institutional approach, the relationship with families, and the territory
- Q3: Approach to documentation as a kernel of the ECEC educators' professional work, describing workflows, critical incidents, methods, techniques, and technologies
- Q4: The actual usage of the documental material gathered and the problems in collecting and interpreting it
- Q5: The adoption of technologies embedded in platforms to mediate documentation, and the problems found in making choices or being impacted by prior or hierarchical choices about technological mediation. (During this question, the problem of children's privacy was particularly focused on.)
- Q6: The adoption of technologies and platforms during the pandemic
- Q7: The educator's opinion on their professional learning needs and the families' learning needs regarding documentation and the use of technologies/platforms for such a purpose

The questions were adopted as an overall coding scheme with seven initial themes. The data were coded from the original verbatim transcriptions in Italian, yielding a corpus of 50,350 words. Afterward, the data were read and segmented: all relevant excerpts of the interviews addressing aspects related to the interview scheme were marked and chosen for the analysis. A segment collected comments, descriptions, or opinions related to any of the interview questions, be it a single word, a clause, or a longer text excerpt, hence composing a subtheme. New subthemes were coded from the initial themes present in the interview guide. Additionally, some logically complemented codes were added for specific codes upon researchers' agreement (e.g., "High Expectations" was complemented with "Low Expectations"). This operation led to 17 themes with 31 subthemes, which were grouped in relation to the questions into five overall themes. The total number of marked segments was 570, but the 140 segments that referred to

personal information or comments were excluded or included synthetically as part of the interviewees' profiles. Therefore, 432 were used in the research. If the segments included a reference related to two subdimensions in a way that was not separable, the excerpt was coded into both. The interview guide, the entire code tree, a table with exemplar excerpts translated to English, and the overall themes' report in Italian, extracted from NVIVO and displaying the interrater agreement exercise, have been published as open data (Raffaghelli et al., 2023). The NVIVO function of code comparison was applied once three researchers engaged in successive rounds of coding and code agreements. Out of the 570 codes, Cohen's kappa was 0.75, deemed a moderate agreement. After consolidating the code tree with the themes that emerged, the researchers carried out a content analysis. Content analysis (Vaismoradi et al., 2013) is a research method aimed at quantitatively identifying certain words, themes, or concepts within some given qualitative data (i.e., text). After coding and detecting the themes in a text, the researchers can quantify and analyse such themes' presence, meanings, and relationships. In our approach, we adopted the NVIVO tools for quantification and aggregation of themes and subthemes, represented in Table 2 as the following:

- The main theme categorised, with connected codes and a related number of interviews where the category emerges, as well as references to a code in the corpus of an interview. The "Total Category" highlights the percentage of interviews referring to the category, as well as the overall number of references and percentage of references supporting the category.
- Comparative representation of the themes and subthemes coverage across interviews (%).
- Comparative representation of subthemes with regard to the theme (e.g., the relationship between Subtheme 1.1 "Kids' Autonomy" with regard to the theme "The ECEC Service Identity" with 32 references [% of coded subthemes, or CS] and the total number of references, namely, 432 references [% total]).
- Overall, the frequency and comparisons of categorised themes and CS across interviews showed the topic's relevance for several participants. The frequency and comparisons of references within the subtheme with the theme and with the total of 432 references display how densely the topic was represented across the participants and in the overall educators' discourse.

Table 2

Thematic & Content Analysis

Categorised theme (CT)	Coded subthemes (CS)	Interviews *N*	%	References *N*	% CS	% total
1. The ECEC Service Identity	1.1. Kids' Autonomy	6	40.0%	6	18.8%	1.4%
	1.2 Collaboration with the Territory	7	46.7%	11	34.4%	2.5%
	1.3. Family Education	4	26.7%	8	25.0%	1.9%
	1.4. Job Climate	3	20.0%	4	12.5%	0.9%
	1.5. Bridging the ECEC Service with the Schooling System	2	13.3%	3	9.4%	0.7%
	Total Category	**4**	**26.7%**	**32**	**100.0%**	**7.4%**
2. Approach to Documentation	2.1. External Pressure to Document	4	26.7%	5	8.5%	1.2%

Categorised theme (CT)	Coded subthemes (CS)	Interviews *N*	%	References *N*	% CS	% total
	2.2. Education Innovation	1	6.7%	2	3.4%	0.5%
	2.3. Difficulties in Documental Analysis	7	46.7%	10	16.9%	2.3%
	2.4. Difficulties in Gathering Documentation	9	60.0%	17	28.8%	3.9%
	2.5. Educators' Skills to Document	10	66.7%	25	42.4%	5.8%
	Total Category	**7**	**46.7%**	**59**	**100.0%**	**13.7%**
3. Using Documentation	3.1. Internal Organisation of the ECEC Service	11	73.3%	29	15.6%	6.7%
	3.2. Documentation to Support Educators' Work	3	20.0%	3	1.6%	0.7%
	3.3. Documentation to Communicate with Families About the Child	10	66.7%	31	16.7%	7.2%
	3.4. Documentation to Settle a Relationship with the Family	5	33.3%	10	5.4%	2.3%
	3.5. Documentation to Share Child Progress with Family	15	100.0%	69	37.1%	16.0%
	3.6. Educational Design	8	53.3%	14	7.5%	3.2%
	3.7. Improving Educational Practice	6	40.0%	11	5.9%	2.5%
	3.8. Documenting to Reflect	9	60.0%	19	10.2%	4.4%
	Total Category	**9**	**60.0%**	**186**	**100.0%**	**43.1%**
4. Using Technologies to Document	4.1. Share on Social Media	10	66.7%	25	21.2%	5.8%
	4.2. Using Apps	7	46.7%	18	15.3%	4.2%
	4.3. Concern on Privacy	13	86.7%	32	27.1%	7.4%
	4.4. Educators' Training	7	46.7%	15	12.7%	3.5%
	4.5. Management	5	33.3%	8	6.8%	1.9%
	4.6. Need of Professional Learning to Adopt Technologies for Documenting	10	66.7%	20	16.9%	4.6%
	Total Category	**8**	**53.3%**	**118**	**100.0%**	**27.3%**
5. Using Technologies During the Pandemic	5.1. Use Technologies for Child Learning	2	13.3%	3	8.1%	0.7%
	5.2. Use Technologies to Support Families	10	66.7%	22	59.5%	5.1%
	5.3. Use Technologies to Educate Families	8	53.3%	12	32.4%	2.8%
	Total Category	**8**	**53.3%**	**37**	**100.0%**	**8.6%**

Categorised theme (CT)	Coded subthemes (CS)	Interviews *N*	%	References *N*	% CS	% total
Total Categories = 5 Total Codes = 31		**Total Interviews = 15**	**100.0%**	**Total References = 432**	**100.0 %**	**100.0%**

Findings

Following are the results that arose from the interviews that were conducted. We will emphasise the most pertinent aspects that arose in relation to the themes that guided the formulation of the interview questions. Specifically, we will examine the interviewees' profiles, some distinguishing features of the various educational services, the approach to documentary material, the use of documentary material, and the application of documentation technology.

Professional Profiles and Approach to the ECEC Service Identity

Most of the interviewees who participated in the research have a background in education and pedagogy, with mention of a degree in education and training sciences, primary teaching, or psychology. Two respondents claim to have a degree in political science. Almost half of the interviewees also claim to have further specialisation in pedagogy (i.e., a master's degree or postgraduate courses). Some of the interviewees, referring to their own professional careers, say that they consider the training courses and seminars promoted in the field of early childhood as opportunities to improve their training. Overall, the participants' preparation to act as ECEC educators is extremely relevant and displays a professional attitude to the service, which is probably empowered by the recent and ongoing Italian regulations (*Commissione nazionale per il Sistema integrato di educazione e di istruzione* [Commissione Nazionale], 2021, 2022) establishing a specific certification to act as educator in early-care services.

As for the ECEC service identity, we wish to highlight the interviewees' attention to the relationship between the educational service and the territory. Some interviewees exemplify this dimension in the educational service's choice to participate in and adhere to projects promoted by the municipality in which the educational service is located, as well as to activate a collaborative network with specific associations. In this action, an attempt is made to involve families to favour the construction of a network between the territory, services, and families, thus being able to "spread a culture of childhood also in the territory" (IR0108).

For the interviewees, each ECEC service aims to promote the child's autonomy, paying particular attention to routines and everyday life as fundamental moments to support children's experimentation and learning. Some educators emphasise the importance of sharing these educational choices and the pedagogical values that guide their actions with parents. In this regard, in some interviews, actions promoted within the educational services to support parenting and to involve families in nursery life are explained. Tellingly, reference is made to meetings with external professionals, meetings within the nursery to share planning and documentary material, or meetings that promote the relationship between parents themselves.

A closer look at the content analysis in Table 2 supports such an idea since the relevance of promoting kids' autonomy is represented in 40% of expressions and closely follows the relevance given to collaborating with the local community. Nevertheless, the service identity is just referred to in comparison with other themes that get the most attention.

Approach to Documentation

Our thematic analysis shows that documentation in the ECEC services is currently both paper and digital, circulating from the services toward the families.

For example, digital material such as photographs and videos are collected and used in some services by educators and teachers to construct a personal diary, which is handed over to families at the end of the educational year.

> Together with the paper, we also hand over a memory stick to the representative of each group, and here is all the photographic material from the whole year. Here are the highlights, so we deliver both the paper and the digital on a flash drive. (S2106)

The digital material collected is also used for creating slides presented during assemblies with parents and for creating exhibitions set up within the service.

Even though the educators and teachers devote specific moments to the arrangement of the documentary material, one of the critical points that emerged from the interviewees is that collecting this material takes up a lot of time during the day. In fact, the hours set aside for collecting and analysing this material are not sufficient to carry out quality work.

> What kind of difficulties do educators encounter? First of all, related to the availability of time, we don't have any, and we are trying to understand how to carve out spaces in the weekly schedule to devote to this type of activity, which, moreover, gives a lot of satisfaction when it is done. And it is very interesting to see the spin-off from one's professional work at a reflective level. (IRO108)

A second critical issue that emerged from the interviewees regarding collecting documentary material is linked to a relational dimension between educator and child. In fact, in the interviews, it emerged that using electronic devices to photograph or film children during educational experiences is difficult for some educators and teachers. Specifically, the interviewees point out their own lack of technology and, at the same time, a lack of training possibilities offered by the relevant bodies. Moreover, the use of these devices, rather than supporting the educational relationship, sometimes penalises it by making it less meaningful. In fact, by diverting attention from the child to retrieve the camera, the educator risks missing the significant moment or, in any case, would not give it the right importance: "Two educators with 18 children even taking photos is difficult because when one of them gets away and somehow goes to get the camera, you lose the moment" (LB2806).

Finally, the interviewees discovered a final crucial point: there is an external pressure to gather documentation, which manifests itself in parents' direct and urgent requests to send pictures and details about their children's daytime well-being. The perception of the educators and teachers is that parents focus more on the aesthetic content of what is done than on the process.

> What is a little bit important to me is perhaps to convey the educational value through the experience, through the how, and not the what. And this, I notice, is a bit difficult in raising awareness [. . .].
> Supporting parenting, for me, also means giving importance to everything that is done, which may not be the thing you bring home. It's not the perfect photo, but the blurry photo as long as the child was running to do the thing he was interested in. (AMU2904)

The content analysis reveals more clearly the conflict between time and difficulties in collecting and, most importantly, analysing documentary material (17% and 29% within the theme, mentioned in 9 and 10 interviews). The educators tend to focus their discourse on the need for training (Subtheme 2.5, 42%, and covering almost 6% of the overall discourse across the interviews).

Using Documentation

With respect to the time at which documentary material is collected, specificities emerge that characterise each specific context of practise, in close connection with the type of material that is used. There emerged a wide range of documentary materials gathered by the educators and teachers of the various educational services.

Several interviewees report that the first moment of collecting documentary material takes place during the child's settling in and, therefore, through the parents' stories and the educators' observations during the child's first weeks at the nursery. From the interviewees' accounts, it emerges that in all the educational services, importance is attached to the daily documentation of the child's experiences and activities at the nursery, which is shared with the parents. In some cases, the documentation is weekly and enables the recounting and display of the children's experiences from the previous week in order to redesign those experiences for the days ahead. From the analysis of the interviews, the evaluation of the educational service by the families is also seen as an important form of documentation, and it emerges that documentary materials and tools are used to observe the children's development and progress throughout the educational year.

Through their stories, it is possible to learn how significant interviewees believe the relationship between documentation and planning to be. The type of information gathered during the children's activities serves as a reflection point for educators and teachers regarding the achievement of the planning's objectives, the group of kids' movement, and each child's participation.

> So we've been working on the documentation for a couple of years now so that it becomes a bit of a tool for us both for planning, for identifying objectives and strategies, and above all, something that can enable and facilitate monitoring as well. (CS2907)

> Documentation choices are closely linked to the design approach, i.e., documentation is a pillar of design and is therefore closely linked. (IR0108)

The documentation is an important tool for reviewing the pathway followed and the steps taken and rethinking the proposals, values, and educational and pedagogical choices, also through collective reflection:

> The purpose of documenting for the educator is to evaluate what I have done, so I can go and look at what I have done and I can redesign with a view to improving, to be ever closer to the child's needs at that time, so it is important for the educator's work so that better strategies can always be found to meet the children's needs. And then the documentation is also very useful in the comparison with colleagues. (KP2110)

The content analysis emphasises the relevance of documentation. The educators recognised several approaches to documentation, highlighting their use as fundamental tools for ensuring transparency, building the educational alliance, and sharing with families their children's experience within the educational service as part of a group and as individuals. (Subtheme 3.3, "Documentation to Communicate with Families About the Child," 17%, and Subtheme 3.5, "Documentation to Share Child Progress with Family," 37%, appear in 10 and all 15 interviews, respectively.) The tools and methods with which the educators document educational experiences are shared during the year in meetings with the group of children's parents; during interviews with individual parents, each child's journey is shared. The first form of documentation with families takes place before and during settling in, as parents are initially asked to tell the educators about their child. Then the educators share their observations of the child's first weeks at the nursery. The parents' opinion of their child is considered fundamental in building a relationship of trust and knowledge of the child. Communication with parents and thus the sharing of children's experiences takes place through paper-based tools (e.g., daily

diaries, wall charts) as well as through photographs, WhatsApp, or specific apps. However, the content analysis also displays that the attention to documentation also relates to the internal organisation of the service (16% in 11 interviews).

Use of Technology for Documentation: Before and After the Pandemic

Increasingly, digital technology is being integrated into educational services for the daily exchange of information with parents, which, as we have seen, represents most of the burden of documenting to engage families. The research shows that at ECEC services, the paper sheet that was handed over to families at the end of the day has given way to the messages sent by teachers and educators in the WhatsApp group. Some interviewees report that schools have been active, especially in the post-COVID-19 period, in the creation of apps for school families. Within these specific apps, one can find master data of the child and parents, information about the day's routine, chats for dialogue with parents, and storage spaces for photos and videos.

Educators and teachers in the interviews also expressed a sense of concern about how children relate to technological devices. If the children notice that they are being photographed at school, they strike a pose as if they are used to the situation. The interviewees' feelings of uneasiness about the use of technology also emerge in relation to the child's relationship with their parents:

> Now you have the need of the parent at that moment to have the photo that is blowing out the candle to put it up later, to publish it, and maybe for a while they don't even ask you how the child is; that is how he/she is, but they hook you and maybe send you ten messages asking for that photo. (S2106)

The choice of whether or not to use social platforms differs widely among educational services. Some interviewees report that for them, the publication of children's photos via social networks such as Instagram and Facebook or the exchange of photos with parents via WhatsApp does not fit into their idea of child protection. These educators and teachers therefore prefer to print the children's photographs and any flyers about initiatives and then display them outside the section. Sharing the photographs collected during the educational year with the families is then done via personal USB sticks. "That is, if you enter that nursery, the nursery talks about the experiences that take place there; it talks to whoever enters it" (IRO108).

On the contrary, other educators and teachers emphasise that, if used correctly, social media can be a resource to publicise one's service, the daily activities carried out with children, and the proposals initiated with parents.

> It is also used a lot on Instagram and other social media to sponsor activities, so for example, if there are different afternoon activities, they are sponsored on social media, and in this way, the news is shared in a more generic way, whereas on WhatsApp, it is shared just with the family group. (ABB1411)

The protection of privacy was another point brought up in the interviews. Most of the educators and teachers emphasise that children's faces are previously blacked out before being shared on social networks and that families are always made to sign a consent form at the beginning of the year to authorise the publication of photos. A critical point emerges in some interviews regarding the educational team's lack of training in privacy protection and a personal awareness of the work that still needs to be done in order to grow and improve as educational professionals:

> Some services tend to obscure the image of the child; you can see the activity, but the child's face is covered instead. Just in our service, (. . .) the image is just in our service, and it is known that this thing is not there; the image is just published, and in addition, the profile is open, and so this thing made me think about the danger there can be. (ABB1441)

As for the COVID-19 pandemic, during 2020, ECEC services were closed from February to June due to the COVID-19 pandemic. Interviewees report that they tried to maintain relationships with children and families ("educational ties at a distance," or LEaD for the acronym in Italian) by organising video calls and sharing activity proposals with videos. The online meetings organised by the services were especially useful for parents as a space for dialogue and discussion:

> At least in the feedback that my parents gave me, both the weekly (online) meeting and all the activity proposed, the participation by the family, and the voices that the children listened to generated moments in which the children smiled and made faces that there was something familiar and that was important for families. (SS2403)
>
> Also, the pandemic triggered digital media usage in unprecedented ways. I consider that there is no return from the pandemic because before, with large numbers of kids like ours, it was unthinkable to activate digital processes with families. The pandemic has accelerated this process. (IR0108)

The content analysis spots how sharing through social media (Subtheme 4.1) is extremely frequent and part of daily life in ECEC services. In 10 interviews, 21% of the references considered this subtheme, which represented 6% of the whole discourse. In contrast, only seven interviews (nearly half of the cases) refer to the use of apps as educational technologies to document and support the overall educational service. Also, technologies' adoption for management purposes (Subtheme 4.5) is less of a concern, brought to the fore in only five interviews (7% of the theme, 2% of the overall corpus). It is somewhat contradictory to learn that the educators seem concerned about privacy as far as they use social media (the subtheme appears in almost all interviews, namely 13, and it is represented in 27% of the discourse within the theme and in 7.4% of the overall corpus). The pressure to document and share with the families through Facebook, Instagram, and particularly WhatsApp, which is within anyone's reach, appears to generate a situation of "need to respond" to the families' requests. But the professional position of educators is also troubled by the need to protect privacy, which is also confirmed by the relevant request (in 10 interviews and with 17% of representation in the theme) for professional development to deal with the problem. The pandemic has pushed in this direction, with educators being more and more concerned about supporting the families (10 interviews, 60% of discourse in the theme, and 5.1% in the overall corpus) as well as promoting parental education (8 interviews, 31% in the theme, 2.8% in the overall corpus).

Discussion

Our study highlighted multiple aspects with respect to pedagogical documentation in its informative-communicative and assessment functions and, therefore, as a mirror of the child's learning pathway. Indeed, pedagogical documentation is part of a culture of childhood that can be cultivated as part of a communitarian perspective of development where the children's voices can be heard (Falco & Kishimoto, 2022). According to our study's findings, each ECEC service has its own forms that guarantee particular support for the activities of meeting with families and getting to know the child, as well as observing the child's development. From this panorama, it emerges that, though documentation is considered extremely relevant, there is a dearth of document uniformity on a broad scale. There is a massive convergence on the idea that documenting children's activities is mainly connected with sharing the educational process with families. The principles that inspire the ECEC services are transparency, participation, and continuity. Sharing makes it possible to strengthen the bond of co-education, thus putting the child at the centre. Such a relevant and noble endeavour is nonetheless hampered by key concerns. As our findings demonstrated, a common point is related to the time factor. The

educators have difficulty reconciling the revision of documentary material with the few working hours available to do so. The educator faces the conundrum of deciding to spend more time with the children and provide care or make "visible" the service's processes and outcomes. This finding is consistent with what Hartong and Förschler (2019) discovered while analysing data infrastructures, flows, and practises in state education agencies in Germany: teachers find it extremely difficult to distribute their time and energies between pedagogical activity, reflection, professionalism, and just bureaucratic tasks. The result is educators stressfully seeking to strike a balance between direct and indirect services, often heedlessly doing whatever "pays" the most, such as tasks connected to visible services' metrics and any other reference of performance (Williamson, 2019). In the case of ECEC, the metrics are not (yet) standardised as in the schooling system, but the families that pay for or support the service exert a discrete pressure over the direction of documentation, converting community engagement in a direction that might not consider the issues of visibility "abuses"; indeed, the educators miss the time to reflect on the value of their pedagogical practise. As far as we could observe, most answers did not reveal a specific attention to pedagogical documentation's value as a tool to narrate and make explicit the idea of child education as a process connected to the ECEC service identity. While the focus of the services is primarily on families' anxieties about "seeing" their child's well-being, development, and learning outcomes, the return to the territory of practises and reflections for the diffusion of a widespread childhood culture seems to be taken for granted as a mere extension of the work with families. Particular attention is given to the aesthetic aspect of the documentation rather than to its content, which recalls a typically regional tradition (Veneto is one of Italy's 20 regions) linked to pre-school education in a Catholic matrix. (Five out of our 15 interviews were representative of a relevant network of religious institutions traditionally supporting families in ECEC.) Pre-school education is historically very much linked to the production of many "little jobs" by the child for an endless series of more or less religious festivities that follow one another very numerous times during the year. Families are accustomed to the child bringing home aesthetically pleasing handicrafts because educators take over from the children for their production. Social media has only given continuity to this tradition, supporting traditional practises through the "nice" affordances offered by platforms like Instagram. The immediate possibility to share any moment within the ECEC service through WhatsApp instead refers to a culture of family surveillance over the educational space that questions rather than supports the educators' autonomy and agency as part of their professionalism. It also questions the children's freedom to fully experience their right to education.

Aligning with Knauf (2020), our findings support the fact that good, reflexive, and purposeful documentation costs time and effort. It is rather simpler to collect the child's photos and all their "little works" at the end of the year than, for example, selecting significant photos that show the child's developmental steps and learning methods, reporting some of their meaningful phrases or actions, or returning some observational notes. Good documentary material, among other things, can be a fundamental element for continuity processes between nursery and pre-school and between pre-school and primary school since it fully outlines the child's profile. Our interviews clearly show how social media and instant messaging platforms have entered to smooth the problem while creating a significant problem relating to the child's privacy. Hence, the implications of how to share such documentary material, whether as open and performative action from the ECEC service (particularly in the case of private services) or as technical work through an app with preconfigured features, make a difference in the way children enter into the logics of platformisation.

Technological devices for documentation, as reported in our interviews, are used daily in educational services. The concern about the use of these devices goes in the direction of declaring actions to protect the child's privacy. In some educational services, the interviewees point out that photographs of children are posted on social networks with their faces obscured.

All interviewees point out that, in their educational services, parents are asked for permission and consent forms for photographs. However, this is done to get the necessary support to circulate material tracing many moments in the child's life that could become the focus of *sharenting* (Barassi, 2017). *Only upon interactions during the interview about the centrality of privacy do some participants question whether requesting permission to share pictures is sufficient to protect the child's privacy and well-being.* Nonetheless, families put pressure to be informed about their child's day, so much so that for a long time, there has been discussion in Italy about the advisability of activating webcams in indoor and outdoor spaces (Garante per la Privacy, n.d.). Very few ECEC services have agreed to this, accepting a logic of control over their work that undermines the foundations of trust in the educational relationship and thus damages the operator's professionalism. In Italy, there are many examples of ECEC services that, in the logic of development and improvement, allow a parent to spend a morning or a day a year precisely to better understand the educational proposal, strengthening mutual trust and co-responsibility in the child's education. However, the interviews report very little on the problem of pedagogical autonomy despite the topic's relevance for providing a professional service.

A compelling point of reflection concerns the presence of social media platforms. The interviewees report that children are now nonchalant while being photographed and sometimes, if they notice, interrupt the game to pose, clearly supporting the way platforms shape families and children's behaviour. No real strategies for reflection on the future around documentation and digital emerged from the research. However, the educators expressed the need to activate professional learning spaces to reflect on the problem. The sad truth is that the entire society does not have a straightforward response, and the positionings around platformisation are frequently ambiguous or pushed by the superficial supposition of joy and pleasure connected to the social activity promoted by social media platforms (van Dijck et al., 2018). As Jacovkis et al. (2022) posit, ambiguity also emerges from the fear of failing to support children's entrance into a society dominated by the narratives and products of platforms.

It is not new that the pandemic has accelerated the effects of platformisation, but neither the educational practises nor the policy decisions that have framed these practises have adequately addressed the issue. In the Italian case, the approach "Continuity of the Relationship with Families at Distance" (Commissione Nazionale, 2020) has put relevant emphasis on adopting instant messaging and videoconferencing platforms to stay in contact with families. Nonetheless, there has also been a direction to generate analogical, non-technologically mediated educational activities given the child's need to experience the world. In many cases, the educators organised boxes with materials for the families to work on together with the children. However, videoconferencing or instant messaging were required for monitoring or sharing reflections. Though this activity could have satisfactory results (to our knowledge, there is no research in this regard at the Italian level), the Ministry of Education and other expert groups did not provide alternative means, leaving the educators to use private platforms such as Zoom, WhatsApp, Facebook, and Instagram. Two Italian national documents in the post-pandemic scenario—namely, the national guidelines for the integrated 0-6 system (Commissione Nazionale, 2021) and the national recommendations for ECEC services (Commissione Nazionale, 2022)—emphasise the need to maintain distance communication with families in order to intercept parents who are not easy to meet during the times traditionally dedicated to them. The Pedagogical Guidelines devote a short paragraph to media and digital culture, where it emerges that using technology means knowing and feeling comfortable using it (Commissione Nazionale, 2021). However, the document suggests that educators should reflect on its use because "social media are increasing interpersonal exchanges and giving birth to new group dynamics; web platforms are modifying modes, timing, and working spaces. Such changes can create, especially in parents and educators/teachers, distrust and concern, while being aware that education cannot remain alien to these topics" (Commissione Nazionale, 2021, p. 12–13). The document does not consider exposure or privacy issues, which is particularly sensitive in the case of visual documentation.

Nevertheless, it emphasises the relevant lessons learned from the LEaD with families. The National Recommendations (Commissione Nazionale, 2022) go a step further in a paragraph that stems from considering forced distance communication as part of pedagogical documentation. It highlights that

> it is necessary to reflect because social media is used by parents, who from the network get a lot of different information about childhood and education. Discussing with them the potential, limitations, and risks of digital communication responds to a felt need and represents a valuable opportunity for dialogue and support for families. (Commissione Nazionale, 2022, p. 30)

The document remarks that, in a post-pandemic scenario, ECEC cannot escape media and digital culture. Also, issues of children's exposure and privacy are considered. Nonetheless, it puts an apparent weight on educators' shoulders to address such a burden.

Indicatively, the international landscape continues to be dominated by an emphasis on using technologies rather than discussing and analysing their applications critically. As a matter of fact, the European Union (EU) has released its last recommendation on the quality of ECEC by 2019 (Council of the European Union, 2019). In this document, ECEC educators' professionalism regarding technologies is considered an activity to (offer) "guidance for providers on the age-appropriate use of digital tools and emerging new technologies," with no references to the problem of data management or privacy issues (Council of the European Union, 2019, C 189/09). The Organisation for Economic Co-Operation and Development (OECD) has progressed in the analysis of professional development connected to ECEC's digital competence (Darnau et al., 2023). Through the analysis of several Western countries (like Finland, Norway, or Spain), Darnau et al. (2023) highlight the efforts made to train educators to support "children multiliteracies" (Finland), promote the "digitalisation of schools" (Norway), or develop educators digital competence "for sustainable use of technologies" (p. 13). On the other hand, responses that simply block technological usage (like the recent policies in Sweden or France to avoid any form of contact with technology) are, as expressed by Selwyn (2023), forms of "moral panics over 'screen-time'" that distract politicians from engaging "in more complicated conversations around the quality of what is being done on these screens" (para. 17).

We might assume here that policy making is still dealing with the COVID-19 post-pandemic aftermath. Also, the initial attempt to strike a balance between comfortable uses of technologies and the negative effects described in the documents above is still open. Additionally, there is a lack of engagement in complex conversations with practitioners, parents' organisations, local administrations, judicial authorities, and platform vendors about finding unique, situated approaches to using technology that satisfy local communities and align with regional, national, and global ethical principles. ECEC services move within a context that is little regulated, with plenty of "good recommendations" but less clear spaces to cultivate professionalism and, hence, participatory engagement with the evaluation of policies and recommendations to adapt to specific educational situations.

Conclusions

Our study is preliminary in scope and methodology. Based on 14 individual interviews and 1 group interview with educators in the Italian region of Veneto, it covers only a fragment of what could be the problem of platforms and children's rights at the crossover of the relevant practise of documentation. After thematic analysis, our findings highlighted that finding a balance between technology-based documentation and children's privacy is not straightforward. Also, educators are calling for policies and further support for technology-driven services and activities that make thoughtful and conscious use of technology to avoid harming children. There is a need to deepen the regional/contextual focus for comparative research that finds

convergent and divergent phenomena. We also need transnational, global, and longitudinal studies at a large enough scale to spot how the subtle practises of the Big Tech industry can threaten the quality of valued educational practises, as is the case with ECEC documentation, with an impact on the provision of quality education. Nonetheless, our research highlighted some professional development requirements for early childhood educators in a data-driven and post-digital society.

The initial in-service training of educators on the matter appears to be an unavoidable issue. Since 2018 in Italy, some regulations have defined ECEC educators' initial training as a three-year bachelor's degree with a substantial number of credits in early childhood-related subjects and a compulsory internship. As of the academic year 2019–20, almost all university courses active in this field in Italy have adapted to the regulatory requirement in a more or less explicit manner, arriving at a definition of training courses that is much more homogeneous than in the past but still determined by individual universities' experiences (Restiglian, 2021). On the other hand, in pre-school (3–6 level), the situation is much more homogeneous since the master's degree in primary teaching (five years) is ensured at the national level. (In Italy, this is the only single pathway for teaching in pre-school and primary school.) In both cases, these are professionalising courses that offer workshops and apprenticeships on educational technologies. But as in other countries, the focus is on using edtech as a panacea for pedagogical innovation (Sancho-Gil et al., 2020). Therefore, pre-service education rarely touches on the issues of data privacy and monetization, the effects of platforms, algorithmic injustice, and so on. When documentation is considered, it is either linked to traditional analogic approaches—such as the Reggio Emilia Approach's *atelier,* understood as an environment that fosters learning and creativity, stimulates questions and curiosity, and promotes children's languages—or the discourses of technology-enhanced teaching experiences (especially in primary school). This liaises particularly with the Reggio Emilia Approach, understood as a space that fosters creativity, stimulates questions and curiosity and hence, promotes a diversity of "children's languages" (Malaguzzi, 1998).

Indeed, as far as in-service education is concerned, no data is available to know whether the subject is addressed in the courses offered. At least for the Veneto region, the reference context of this research, there is no information on the activation of specific courses that link technology and documentation with reference to the European document General Data Protection Regulation (GDPR; Council of the European Union, 2016).

Yet it seems clear that ECEC educators' professionalism cannot be exempt from the in-depth study and full awareness of the implications of these issues. Even the possibility of doing initial and ongoing training on privacy can lead educational and school teams to develop a greater awareness of the concepts of freedom and respect for the child.

Our research only shed light on the tip of the iceberg in this regard, and more evidence is required to understand how structured pre-service training in ECEC could deal with the problem. Such training could open a space for educators to exercise political agency and actively engage in discussions about the protection of children's right to privacy, the right to educate kids over intellectual and pedagogical independent bases (shaped by professional educators), and the right to promote safe and sustainable practises for sharing pedagogical documentation with families, beyond the pressures of visibility and performance as a push effect of society's platformisation. Moreover, in comparing our research results with the current state of play in policy making, we uncovered that the discourses in relevant Italian and international documents still stick to technological adoption or complete ban instead of a more nuanced and complex engagement with programmes for developing ECEC educators and services' professional response. We argue that professionalism and educators' political and professional agency are the key drivers of harmonic transformations that embrace socio-technical complexity.

As the major policy priority "Starting Strong" (OECD, 2017) reminds us, the early years of a child's life are increasingly viewed as the first step in lifelong learning and a key component

of a successful educational, social, and family policy agenda. There is hence a compelling need to dig further into the problems of privacy connected to platformisation and children's data monetisation embedded in documentation practises and rethink this extremely relevant area of professional activity for children's rights to educational quality.

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