Language, Culture and Curriculum

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rlcc20

Multiple lenses to understand and shape multilingual literacy practices in Early Childhood Education

Claudine Kirsch & Nancy H. Hornberger

To cite this article: Claudine Kirsch & Nancy H. Hornberger (05 Apr 2024): Multiple lenses to understand and shape multilingual literacy practices in Early Childhood Education, Language, Culture and Curriculum, DOI: 10.1080/07908318.2024.2335938

To link to this article: https://doi.org/10.1080/07908318.2024.2335938

Published online: 05 Apr 2024.

LANGUAGE, CULTURE AND CURRICULUM
https://doi.org/10.1080/07908318.2024.2335938

Multiple lenses to understand and shape multilingual literacy practices in Early Childhood Education

Claudine Kirsch [a] and Nancy H. Hornberger [b]

[a]Faculty of Humanities, Education, Social Sciences, University of Luxembourg, Esch-sur-Alzette, Luxembourg; [b]Graduate School of Education, University of Pennsylvania, Philadelphia, USA

ABSTRACT

Programs of multilingual education in Early Childhood Education and Care (ECEC) are promising because they contribute to the development of young children's language and literacy as well as their multilingual identities. In practice, many educators are unsure of how to engage children in multilingual literacy activities and policy often falls short of providing adequate guidance. The present paper investigates the case of Luxembourg where a multilingual program has been implemented over the last years. We draw on the continua of biliteracy to examine the range of language and literacy practices of 12 educators who worked with two to four-year-olds in three private, commercial centers differing in regional location, urban or suburban setting, and dominant language spoken. Using the lenses of the biliteracy continua of context, media, content, and development, we analyze examples, explain differing practices, and explore the educators' varied understandings of languaging, literacy, and learning. We thereby demonstrate that the continua are a heuristic for research, teaching, and policymaking in multilingual environments. We conclude with implications for professional development, policymakers, and researchers.

ARTICLE HISTORY
Received 7 December 2023
Revised 14 March 2024
Accepted 22 March 2024

KEYWORDS
Continua of biliteracy; Early Childhood Education and Care; Luxembourg; multilingual education; literacy practices; translanguaging

1. Introduction

In Europe and worldwide, more and more young children grow up speaking two or more languages and many develop the majority language of the country they live in with the support of professionals in Early Childhood Education and Care (ECEC) (Bergeron-Morin et al., 2023). Including children's home languages in language and literacy activities in ECEC makes young children not only aware of the plurality of languages and supports their language development, but it also contributes to their openness and confidence, facilitates socialisation, and reinforces multilingual identities (De Houwer, 2020; Hélot, 2007). While the outcomes of multilingual ECEC programs are promising, many ECEC professionals appear unsure of how to promote multilingualism and of which language and literacy activities to offer in one, let alone several languages (Kirsch & Bergeron-Morin,

CONTACT Claudine Kirsch claudine.kirsch@uni.lu

2023). Participation in a professional development course helped ECEC teachers and educators in multilingual Luxembourg develop the necessary knowledge, attitudes, and skills to implement multilingual pedagogies (Kirsch et al., 2020).

Luxembourg is one of few countries in Europe with a national policy on multilingualism in ECEC. Since 2017, professionals have been asked to familiarise children with Luxembourgish and French and value their home languages. This is a difficult call on account of the heterogeneity of the centers and the language diversity of the children. According to a survey with parents of children aged zero to four, one-third of the children speak one language at home, one third two and the final third speak three or more languages (SNJ, 2023). Following the implementation of the language-in-education policy, the mixed-method project 'Collaboration with parents and multiliteracies in Early Childhood Education' (2020–2023) explored, examined, and tried to develop literacies in multiple languages in day care centers with educators and parents. Findings relating to multilingualism and literacies based on observations in three centers show that the educators offered various types of literacy activities in the main language of the center and, depending on the setting and the educator, included (or not) children's home languages (Kirsch & Bergeron-Morin, 2023). Translanguaging (García et al., 2011), the strategic use of one's entire semiotic repertoire for communication, was a legitimate practice in two centers. The range and formality of the activities, their length and frequency, the space given to writing, as well as the quality of the interactions differed significantly across the centers (Kirsch & Kemp, 2024; Kirsch, under review).

In the present paper, Kirsch, the principal investigator, and Hornberger, the scientific expert of the project, review the above-mentioned findings in line with the continua of biliteracy (Hornberger, 1989; 2022). The aim of the present reflection is, firstly, to offer new and deeper perspectives on the literacy practices documented in Luxembourg and, second, to illuminate and inform the continua by bringing it to bear in a new context. Formulated in the 1980s in the context of a multi-year, comparative ethnography of language policy in two Philadelphia public schools and communities, the continua of biliteracy offer lenses through which to see research, teaching, and language policy in bilingual and multilingual settings. The framework has served as heuristic in research, teaching, and program development locally, nationally, and internationally in Indigenous, immigrant, diaspora and decolonising language education contexts, evolving over time to accommodate both a changing world and a changing scholarly terrain.

Two foundational notions – of biliteracy as interpretation and interaction around writing in two or more languages and of fluid and dynamic continua making up communicative repertoires – are the building blocks for the continua of biliteracy framework. Twelve continua are grouped into four three-dimensional sets or lenses that bring into focus multiple dimensions involved in creating learning environments (contexts) that recognise and build on (develop) students' language and literacy repertoires (media) and the meanings and identities expressed therein (content). The framework's intersecting and nested continua represent the multiple, complex, and fluid interrelationships between bilingualism and literacy and of the contexts, media, and content through which biliteracy develops. Alternating the lenses allows us to see in turn that multilingual learners *develop* biliteracy along reciprocally intersecting and dynamic first language-second language, receptive-productive, and oral-written language skills continua; through the *medium* of two or more languages and literacies ranging along continua of similar to dissimilar linguistic structures, convergent to divergent scripts, and simultaneous to successive exposure; in *contexts* scaled from micro to macro levels and characterised by varying mixes of monolingual-bilingual and oral-literate language practices; and expressing *content* encompassing majority to minority perspectives and experiences, literary to vernacular styles and genres, and decontextualised to contextualised language texts. The framework posits that the more bi/multilingual students' contexts of language and literacy use allow them to draw from across the whole of each and every continuum, the greater are the chances for their full language and literacy development and expression. It is precisely in the dynamic, rapidly changing and sometimes contested spaces along and across the continua that biliteracy use and learning occur. We argue that in the case of Luxembourg, as in others, the continua of biliteracy lenses offer a vision for intentionally opening up implementational and ideological spaces for fluid, multilingual, oral, contextualised practices and voices at the local level (Hornberger, 1989, 1990, 2005, 2022; Hornberger & Skilton-Sylvester, 2000; Hornberger & Link, 2012).

In what follows, after first providing a brief overview of the research design, participants and methods, our reflection is organised around the alternating lenses of the continua. We offer examples of literacy practices observed in the research project and explore the educators' understandings of languaging, literacy, and learning, using the lenses of the biliteracy continua of context, media, content, and development to analyze examples and explain practices. Discussion of relevant literature is included in these sections. Finally, we draw implications for professional development, policymakers, and researchers.

2. Methodology

To develop literacies and collaboration with parents, the COMPARE research team had organised a professional development course with the managers and the specialised educators for multilingual education of 12 ECEC centers in Spring 2020. The participants could volunteer to take part in an observational study the following academic year. To maximise diversity in our sample, we chose interested centers in different regions of Luxembourg and with different language profiles. The center in West Luxembourg was Luxembourgish-dominant while Luxembourgish and German were the main languages of the setting located in the East, close to the German border. The educators in these centers were fluent in Luxembourgish, German, French, and English and some could also communicate in Portuguese with the children. The center close to Luxembourg-city was French-dominant as it employed mainly French staff. Some of these educators communicated at times in English or Italian with children but translanguaging was less frequent than in the other two centers. In each setting we observed a diverse group of children aged 2–4. The following languages were recorded: Luxembourgish, French, German, Portuguese, English, Italian, Spanish, Swiss German, Romanian, Greek, Icelandic, Russian, Arabic and Hebrew (Kirsch & Bergeron-Morin, 2023; Kirsch & Kemp, 2024; Kirsch, under review).

This paper draws on observations made by four researchers between September 2020 and October 2021. The observational data of interactions of 12 educators and 9 children were collected over 48 days and included fieldnotes, thick description and 13 h of video-recording. Most videos were transcribed, and relevant details were added, others were described in detail. Based on conversation analysis from a sociocultural perspective

(Seedhouse, 2005), and depending on the focus of the above-mentioned papers, the coding included the type of literacy activity (e.g. reading, telling stories, singing, writing), the languages used (e.g. languages and translanguaging), the educators' strategies to promote interaction and understanding (e.g. asking questions, correcting, translating, repeating), and the role of the educators, children, and parents (e.g. reading stories, engaging in dialogue about the stories).

While the present reflection is based on findings from the above-mentioned papers, it presents unpublished examples which it discusses in relation to the continua of biliteracy. Therefore, in addition to the previous codes, the analysis takes account of the monolingual or multilingual participants (*contexts*); the similarities/ differences between the languages and scripts as well as the simultaneous/ successive exposure to the various languages (*media*); the ways in which children's language identities were presented as minoritized/ majoritized in more contextualised/ decontextualised activities with various text genres (*content*) and, finally, the ways in which children listened, spoke, read or wrote by drawing on home languages or other languages to develop their language and literacy skills (*development*). To illuminate the continua, we present what we call an 'impressionistic rendering', thereby adopting Katherine Mortimer's use of blue circles to highlight salient continua in play (Mortimer & Hornberger, 2023). The circles on each of the 12 continua represent our impressionistic understandings of the educator-child interactions in literacy activities in one or more languages and scripts. While each rendering offers a multilayered overview of an activity, the comparison of the renderings helps us to visualise similarities and differences between activities at various levels.

Prior to data collection, the project had been approved by the Ethics Review Panel of the University of Luxembourg. The educators and parents had been informed about the purpose, risks and outcomes of the study as well as their rights, and given consent. To gain and maintain the assent of the young children in our project, we only observed them in naturally occurring situations in the presence of their educators. To ensure anonymity of the educators and centers, and focus on literacy practices rather than individual educators, we will not mention the dominant languages of the centers in the examples provided.

3. Understanding language and literacy practices: context of biliteracy

We start with a concrete example that illustrates the ways in which informed ECEC practitioners in Luxembourg created a productive environment that promoted the receptive and productive use of three languages in oral and written communication.

Example 1. A poster for the caregiver (October 2020)

To make a present for the children's father or caregiver, the educators created a poster for each child which showcased a picture of the child's caregiver, an explanation of the child written by the educator, as well as other multimodal expressions of the child. A few days before the production of the posters, the educators who knew that all children had two caregivers, had written to the mothers or caregivers in Luxembourgish, German, French, or Portuguese, depending on their competences, to ask them to send in a picture of their partner. While out in the forest, the educators showed the children this picture on the iPad. They let children speak about it first, which resulted in many children participating independently of

> the language. For instance, when three-year-old Portuguese-speaking Davide struggled with Luxembourgish, he was encouraged by Portuguese-speaking Ms. Daria to tell his story in his home language. Pointing at the picture of him and his father at the hairdresser's, he explained his hair was 'muito grande', too long. He then moved his index and middle fingers up and down to sign cutting. Gloria, another Portuguese-speaking child, listened carefully. Lia, who spoke Swiss German at home, repeated 'grande' after her peer, while two other children mentioned in Luxembourgish that they had been to the hairdresser's as well. Another child added that his hair was longer when he left, an utterance that one of the educators revised, offering the word 'shorter'. Once the story was told, the educators asked each child what they should write down and one educator took down the accounts. Lia and Gloria stayed close to the scribe. They carefully observed, pointed to words or lines, or asked questions such as 'Where is [the word] Nick?'. The educator pointed to the words and, at times, mentioned 'Look, here it says daddy'. Over the following days, the educators wrote the final version on each poster. Depending on the child, the text was in one language, Luxembourgish or Portuguese, or in two, for instance, in Luxembourgish and Swiss German. Motivated, the children added marks, scribbles, or stroke units as well as drawings.

The languaging practices of the educators and children in this example were typical of our year-long observations, and, therefore, representative (e.g. Kirsch & Bergeron-Morin, 2023). To help children develop their multilingual identity and express themselves, the educators created authentic situations where children could take part in oral and written communication. When translanguaging, children used all communication channels, that is features of several languages, several modes, and several tools, receptively and productively (Hornberger, 1990, 2005). This example is reminiscent of a study in Philadelphia USA showing the rich multilingual contexts crafted by two primary school teachers. One helped children learn English and Spanish in a dual-language program, and the other focused on English while taking account of the learners' knowledge of Khmer (Hornberger, 1990).

To comprehend the educators' and children's communicative repertoire and understand why the adults promoted biliteracy in this particular way in Luxembourg, it is essential to understand the context of multilingualism in policy and practice in Luxembourg. In the continua of biliteracy framework, contexts for developing one's full communicative repertoire are understood as scaled local to global spaces created by three intersecting continua which have long informed multilingual education research and practice, namely the continua of **multilingual to monolingual** competences and uses, **oral to literate** practices and instances, and **micro to macro** situations and environments (Hornberger, 1989, 2022). We bring these lenses to consider the ways they shape Luxembourg's linguistic landscape and language-in-education policies, and in turn the three ECEC centers we observed.

3.1. The linguistic landscape

Multilingualism is a defining characteristic of all macro and micro features of life in Luxembourg. In the nineteenth century, German was considered the language of the population, while French dominated in higher social groups. In the twentieth century, Luxembourgish, a Moselle-Franconian dialect elevated to the status of a language in 1984, became the national language as well as a symbol of Luxembourgish identity and independence (Horner & Weber, 2008). Luxembourgish, German and French became the official languages. The language situation is, however, more complex, partly explained by migration waves in the twentieth century where industrialisation and, later, the establishment of European institutions and the financial sector encouraged the growth of an international population. In 2019, 74% of the residents reported working in a multilingual environment. Those in the education sector communicated mainly in Luxembourgish, French, German, English, and Portuguese (Reiff & Neumayer, 2019). A large survey with parents of children aged zero to four provides insights into the declared language use at home: 62% of the families report speaking French, 56% Luxembourgish, 25% English, 22% Portuguese, and 17% German (SNJ, 2023).

The residents' language and cultural diversity is reflected in the linguistic landscape. Official, commercial, and private signs are frequently written in several of the official languages, advertisements can be in the official languages as well as in the contact languages Portuguese, Italian, and English, and the written press includes more and more Luxembourgish which currently undergoes standardisation and codification (Purschke, 2017). Language diversity was also a characteristic feature of the three centers as seen in Section 2. While all centers had a highly diverse group of two to-four-year-olds, the educators in two of the centers were multilingual and tended to translanguage frequently. Multilingualism across macro to micro contexts helps explain both the language skills of the adults and children, presented in Example 1, and, more importantly, the legitimacy of translanguaging which is a common societal practice in Luxembourg (Horner & Weber, 2008).

3.2. Language-in-education policies

The state education system aims to develop children's competences in Luxembourgish, German, and French in its primary school, with challenging oral and written standards expected in each language (MENJE, 2022). To help their children develop Luxembourgish from an early age, many parents enroll them in a day care center (non-formal education) and from the age of three in the optional year of early education (formal education). The language use of educators in non-formal education differs according to institutions. While state-funded centers recruit Luxembourgish staff, the private sector largely employs French-speaking staff who live in Luxembourg or commute daily from France or Belgium (Schreyer et al., 2024). Ethnographic studies prior to the 2017 language-in-education policy have shown that educators in both Luxembourgish-dominant and French-dominant centers largely held on to monolingual language ideologies (Neumann, 2015).

One of the Education Ministry's steps taken to reduce the persistent inequalities in attainment and strengthen educational opportunities is the 2017 policy on multilingual education that focuses on Luxembourgish and French while valuing other home languages. Educators in a Luxembourgish-dominant setting develop children's skills in Luxembourgish and familiarise them with French whereas those in French-dominant centers do the opposite. Educators' practices need to be informed by the national framework for childhood and youth (MENJE & SNJ, 2022). Multilingualism is a transversal strand of the document that promotes a holistic view of language learning, encouraging educators to use languages flexibly, and understanding children's switching between languages as normal linguistic practices. It promotes partnerships with parents as a means to value children's home languages and suggests a range of literacy activities (e.g. stories, finger plays, first scribbles, discovery of books and symbols) to develop languages and literacy in multiple languages. While reading and talking about texts in multiple languages can appear to be oral activities to an ECEC observer's ear, they in fact promote biliteracy because 'communication occurs in two (or more) languages in or around writing' (Hornberger, 1989, p. 2). Example 1 highlights the powerful role that context plays in framing and shaping language and biliteracy practices and illustrates the language policy in action: it shows the ways in which the multilingual educators in a Luxembourgish-dominant center communicated in Luxembourgish but switched to Portuguese to accommodate a child's needs and drew on Swiss German to respond to the interest of another child. They valued home languages orally and in writing. By contrast, other multilingual educators and emergent multilingual children we observed acted as monolinguals. What elements other than the structural, organisational and ideological aspects we have briefly outlined explain the diversity in the language and literacy practices despite the new policy?

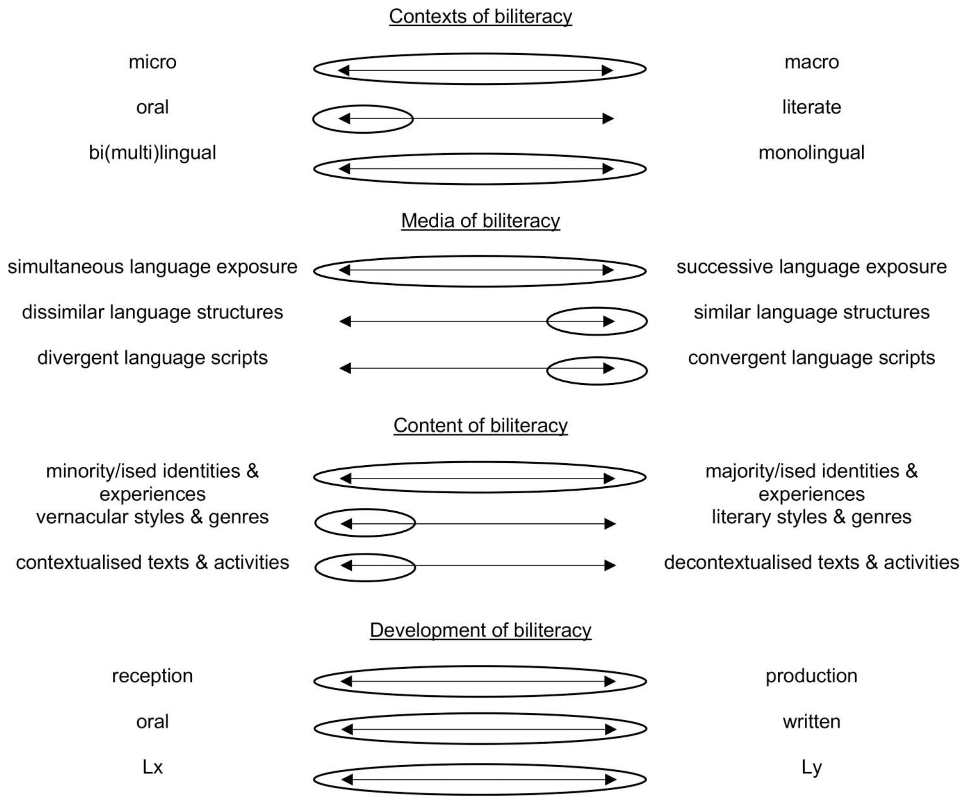
4. Understanding multilingualism and translanguaging: media of biliteracy

In line with the education policy in ECEC settings in Luxembourg, the educators in Example 1 designed an inclusive and participatory environment where children were encouraged to use their entire semiotic repertoire (e.g. features of several languages, gestures, pointing, scribbles) to communicate (García, 2023). The poster is a good example of cultural and linguistic diversity as well as multiliteracies (Cope & Kalantzis, 2009), reflecting a multiplicity of communication channels and media (visual, audio, tactile, gestural, behavioural, spatial, temporal) (Hornberger, 2005). It incorporated the use of different technological tools and each child's final product combines pictures, drawings, random letters glued on the paper, their own scribbles and stroke units, and hand-written text, all in one or more languages depending on the child's own language use.

The continua of biliteracy framework proposes the media of biliteracy as the communicative repertoire that includes multiple and fluid language varieties, scripts, modes and modalities of communication (Hornberger, 2022) through which learners develop biliteracy. In the framework, this repertoire of media is arrayed along three intersecting continua which have long informed multilingual education research and practice, namely the continua of **simultaneous to successive** exposure to/acquisition of languages and literacy, **dissimilar to similar** language structures and **divergent to convergent** language scripts (Hornberger, 1989). We bring these lenses to consider the ways they shape the use of multiple language varieties, scripts, modes and modalities of communication in the three ECEC centers we observed.

We illustrate Example 1 in an 'impressionistic rendering', focusing for now on the first two lenses of the continua (context and media). The educators and children in that example engaged monolingually or multilingually, depending on the person, in a literacy activity that focused on oral language development as requested by the national framework for ECEC and the language-in-education-policy (context). The languages involved, Luxembourgish, Portuguese, and Swiss German, had similar structures and scripts (media). Children were exposed to the languages both simultaneously as they and the educators translanguaged, and successively, as children took turns to narrate and as the activity was carried out over several days.

Impressionistic rendering 1. Overview of Example 1: Focus on Context and Media.



However, in contrast to the above, observations across the three centers showed that not every educator allowed children to activate all modes and channels of communication, and home languages did not always count as cultural capital as they did in Example 1 (Kirsch & Bergeron-Morin, 2023; Kirsch, under review). Differing views of multilingualism and translanguaging appear to underpin these practices and explain differences.

4.1. Translanguaging

Seen from the perspective of the continua of biliteracy, translanguaging refers both to learners' dynamic languaging practices and to the pedagogical practices that enable learners to develop their oral and written repertoires in their multilingual community and educational settings (Hornberger & Link, 2012). Two-thirds (or 8) of the educators we had observed across the three centers appeared to understand multilingualism as the flexible and dynamic manner in which multiple languages could be used either by the same person, for instance in mixed utterances, or in the same conversations where one person used features of one language while another one drew on features of a different one. In the transglossic conversation in Example 1, one educator conversed in Portuguese with Davide and wrote his account in his home language, while the second educator and other children communicated in Luxembourgish even while paying close attention to the interactions in Portuguese. Based on conversations and interviews, the educators who used languages flexibly appeared to perceive translanguaging as a useful strategy (Poza, 2017) to develop a trusting relationship with children, develop an inclusive environment, make themselves understood, and help children communicate in ways similar to ECE professionals elsewhere (e.g. Mary & Young, 2017; Sembiante et al., 2023). Our observations also showed that translanguaging helped the young children communicate (e.g. Sembiante et al., 2023), socialise (e.g. García et al., 2011; Sanders-Smith & Dávila, 2019), and mark their multilingual identity (e.g. Carrim & Nkomo, 2023). By using all modes, signs, and symbols at their disposal to make and express meaning, they disregarded the social boundaries between languages and semiotic systems that adults have constructed (García, 2023).

There were other instances where educators appeared not to be aware of the language hierarchies they reproduced, nor of the transformative power of translanguaging (García & Otheguy, 2020). A few examples illustrate this. Some educators strictly used the dominant language of the center and the children learned to converse with the adults and peers in this language, thereby suppressing their home language. These educators rarely communicated in any other languages, even if they knew them, and made no effort to learn a few words in Greek or Arabic which were among the home languages of the children. Such examples bring to mind the implementation of bilingual education in other countries, for instance in France (Hélot, 2007), where minority languages were not considered. Other educators seemed to use languages spontaneously or at random. For example, some Portuguese-speaking educators communicated in Portuguese with some three-year-olds, independently of the children's language needs, but refrained from using French or German with other children, even when the children knew these languages well. These educators appeared unaware of their language choices and possibly switched languages out of habit (as they would do outside the center) rather than for educational purposes, such as helping children develop language skills and including them.

Yet again other educators intended to value home languages in multilingual activities but did not always succeed in leveraging children's repertoires for learning and being. For example, some labeled pictures in books in Luxembourgish, French, and German, and their translations seemed to fulfill no other role than to implement the language policy. Others invited parents to the center to read in a home language (see Example 2 below) but this language vanished when the parents left. Again, others asked parents to send in songs in multiple languages but then showed uncertainties in the enactment of the activities themselves. We observed some sing 'head, shoulders, knees and toes' in Luxembourgish, German, French, Portuguese, and Swiss German, but they became hesitant when they were to sing in Icelandic. They explained that the language was difficult and, in this way, may have shown they valued languages differently. In the above-mentioned examples, some children may have felt othered or excluded rather than valued and included.

Together, the above-mentioned analyses highlight a wide range of practices along the simultaneous-successive continuum in the ways in which educators drew on the languages and scripts of the children's communicative repertoires orally and in writing. We argue that flexible multilingual practices need to be carefully monitored and based on a responsible theory of multilingual education to guarantee equal status to languages and equal participation of children (Aleksić & García, 2022; Hamman, 2018; Seltzer et al., 2020). This includes paying attention to the content of the literacy activities, explored in the following section.

5. Understanding literacy: content of biliteracy

The national framework (MENJE & SNJ, 2022) for ECEC in Luxembourg expects educators to offer literacy activities in multiple languages. It refers briefly to books and first scribbles without providing further details or guidance. In many bi(multilingual) contexts (Englezou & Fragkuli, 2014; Kirsch & Aleksić, 2021) as well as in ECEC settings where children are exposed to foreign languages (Thieme et al., 2022), stories are among the most frequent literacy activities. Example 2, a representative example of the ways in which parents were included in literacy activities in some of the three centers (e.g. Kirsch & Bergeron-Morin, 2023), illustrates the ways in which a mother, assisted by her child, read the Russian story Teremok. She read the entire tale in her home language, which only she and her child understood, before the educator moved back to the dominant language of the center.

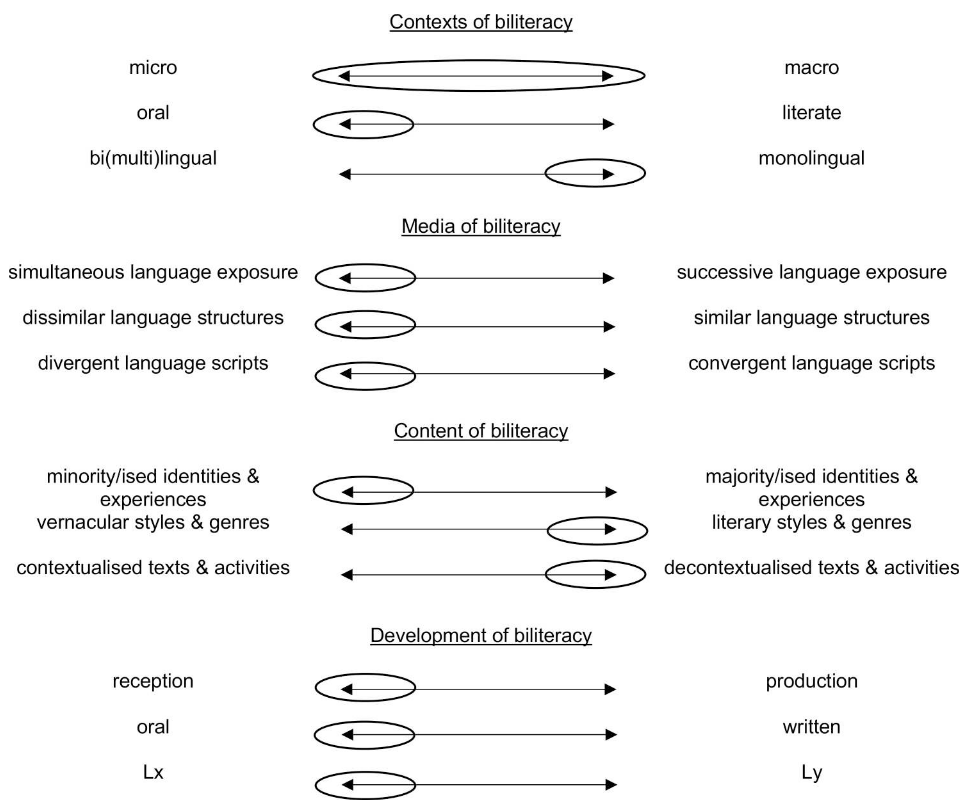
Example 2. A Russian story (November 2020)

> Antonia's mother explained in the dominant language of the center that she would first read the story in Russian and then narrate it in the dominant language of the center. She presented the characters of the book, showed the children the figurines she had brought, and began to tell the story in Russian. Antonia assisted her mother by handing her the figurines she pointed to and adding words in Russian to complete her mother's sentences. The girl uttered longer sentences on two occasions and her mother expanded. After five minutes, the team had finished. The mother asked if anybody had understood, but her question was left unanswered. Rather, the educator and the children showered her in lavish applause. The educator neither took up the mother's offer to tell the story in the dominant language of the center nor engaged the children in a conversation about the content of the story. She showed three figurines that the mother labeled in Russian, repeated these words, encouraged the children to do the same, and announced that they had spoken some Russian. The mother left and no further reference was made to her visit or the language at a later stage.

Three intersecting continua of biliteracy content take account of the identities and meanings expressed through biliterate practices and the important role of the continua of **contextualized to decontextualized** texts and activities, **vernacular to literary** styles and genres, and **minority/ized to majority/ized** identities and experiences in developing learners' biliteracy. This was an insight originally proposed in Skilton-Sylvester's research on literacy, identity and educational policy among Cambodian women and girls in Philadelphia, and led to expansion from the original nine continua of context, media, development (Hornberger & Skilton-Sylvester, 2000). We draw on the continua of biliteracy content to explore and reflect on the types of biliteracy texts, genres, and identities observed in the centers, and the understandings of literacy possibly underlying them.

Impressionistic rendering 2 illustrates Example 2 in relation to all continua. To implement the education policy in a largely monolingual center and offer activities with parents to contribute to children's oral language learning (context), the educators had invited Antonia's mother to the center. The latter read a Russian story and exposed children to a language and script unfamiliar to them (media and content). The monolingual activity in Russian about a story with unknown characters remained largely decontextualised, although the mother had offered to translate the text into the dominant language and leave the book so that children could explore it. Apart from Antonia, positioned as the minority-language speaker, who uttered some sentences in Russian, the other children listened and some repeated three words in Russian (development). In contrast to Rendering 1, which indicated opportunities to draw from across the whole of each and every continuum, Impressionistic rendering 2 suggests that children tended to work on one side of each continuum. As such, we argue that this learning environment affords fewer opportunities for them to develop and express language and literacy skills.

Impressionistic rendering 2. Overview of Example 2: Focus on Content.



Observed differences in the types of biliteracy texts, genres, and identities offered across the three centers might reflect educators' differing understandings of literacy, as explored in the next section.

5.1. Texts, genres, and identities

Literacy can be understood, in a narrow sense, as a set of discrete skills that need to be developed to be able to read and write text or, in a broader sense, as a practice that constructs and reflects cultural and social identities. Street (1995) contrasts these in the 'autonomous model of literacy' which appears 'neutral' as it focuses on cognitive skills and avoids any reference to the social and cultural context, and the 'ideological model' that is based on sociocultural theories and emphasises the interconnectedness of skills, social interactions, and cultural context (Barton & Hamilton, 1998). These need not represent opposing understandings of literacy, however, but different aspects to be considered when developing students' literacy skills and embedding literacy as a cultural practice.

Based on the observations and interviews, the COMPARE team found that a third of the educators in our study tended to perceive literacy as a social and cultural practice while also acknowledging literacy skills (Kirsch & Bergeron-Morin, 2023; Kirsch & Kemp, 2024; Kirsch, under review). For example, the educators in Example 1 engaged children in contextualised oral and written productions in the dominant language of the center and children's home languages, thereby validating children's multilingual identities and experiences and encouraging children to relate aspects of stories to their own experiences. At the same time, they attentively listened to children, rephrased or expanded answers, offered corrective feedback, or translated when necessary to help children identify key elements of stories, understand the plot, and develop skills in the dominant language of the center.

Other educators appeared to focus only on the development of discrete skills. Some instrumentalized stories to practice mathematical concepts (counting, size), develop vocabulary (colours, names of animals), or develop listening skills. Little attention was paid to the content and few meaningful connections were made with the children's prior experiences (cf. Kirsch, under review). These educators also tended to use stories in children's home languages to highlight minoritized identities, as seen in Example 2, but without engaging in those languages and cultures. On such occasions, we observed the educators leave the floor to the parents, who, unsure of what and how to read in the center, frequently replicated their home literacy practice although they were aware that the educators and children were unable to understand the particular language or literacy genre presented in a decontextualised activity. One wonders if such literacy events allow children to appreciate the richness and diversity of languages and cultures as intended. Showcasing Russian in this way may reinforce boundaries between languages and cultures rather than challenge monolingual ideologies (García & Otheguy, 2020). Like the children in a Luxembourgish preschool who were forced in a home language activity to choose Portuguese or Serbian flags according to their citizenship although they insisted on taking the Luxembourgish flag (Aleksić & García, 2022), the activity in Example 2 may result in children making strong and inflexible connections between language, citizenship, cultural background, and identity (Horner & Weber, 2008), rather than developing a more fluid view of transnational literacies contextualised across national borders (Hornberger & Link, 2012).

A counterexample comes from the well-known 'Diedenheim project' in France where the teachers developed an educational project with the parents and helped them prepare the cultural content (e.g. languages, history, food) they wished to share with the children (Hélot & Young, 2002). As a result, the parents provided children with rich, contextualised opportunities to, among other matters, engage with languages of dissimilar structures and scripts. Example 2 also contrasts with Example 1, where the educators and children put home languages alongside the majority language. This is a powerful way to validate languages equally and develop multilingual competence. The multilingual and multimodal productions in Example 1 are reminiscent of Cummins and Early's (2011) 'identity texts' in Canada.

In summary, the examples illustrate how educators' understandings of literacy might inform pedagogical practices that emphasise different points along the content continua from minority/ized to majority/ized identities, vernacular to literary styles and genres, and contextualised to decontextualised texts and activities.

6. Understanding learning: development of biliteracy

The range of examples of language and literacy practices given throughout this article provides ample evidence that the young children were engaged in the development of their biliteracy although to different extents, and very much in response to the communicative demands of the situation and activity. How the educators developed children's literacy skills, however, likely depended not only on their understandings of literacy but also on their understandings of learning. While the educators in Example 1 involved children in translingual conversations and modeled language use, the educator in Example 2 encouraged listening and the reproduction of a few isolated words. Like other educators influenced by a skills-based approach, she tended to read stories in the dominant language of the center and check comprehension through closed questions.

Below is a final example, illustrating the way in which an educator used prompts in multiple languages to develop children's understanding of a text.

Example 3. Reading and talking in multiple languages (January 2021)

The educator chose a small hardboard book with flaps and ensured all three-year-olds sat on the small carpet area in front of her. She suggested 'Let's look at the book *The sea is deep and gigantic*', reading out the title. 'Should we look at the book together?', she asked and upon the children's confirmation, began. She read the first sentence in a language most children understood well before she changed her tone of voice and switched to the dominant language of the center. She let the children open the flaps and interact with the moveable elements. She pointed to the diver, fish, algae, sea turtle, and other details, labeled them, or had the children name them. She repeated some of the words in Portuguese for Luisa, the youngest child in the group who spoke Portuguese. Luisa pointed to a picture of flippers and the educator explained its functions, making relevant arm movements, and connecting the item, as she always did, to children's experiences. She then read the next sentence, with little intonation. After a few seconds of her reading, the children looked away and only faced her, once again, when she switched back to the dominant language of the center. Using simple language, she engaged them in additional low-level questions and labeling.

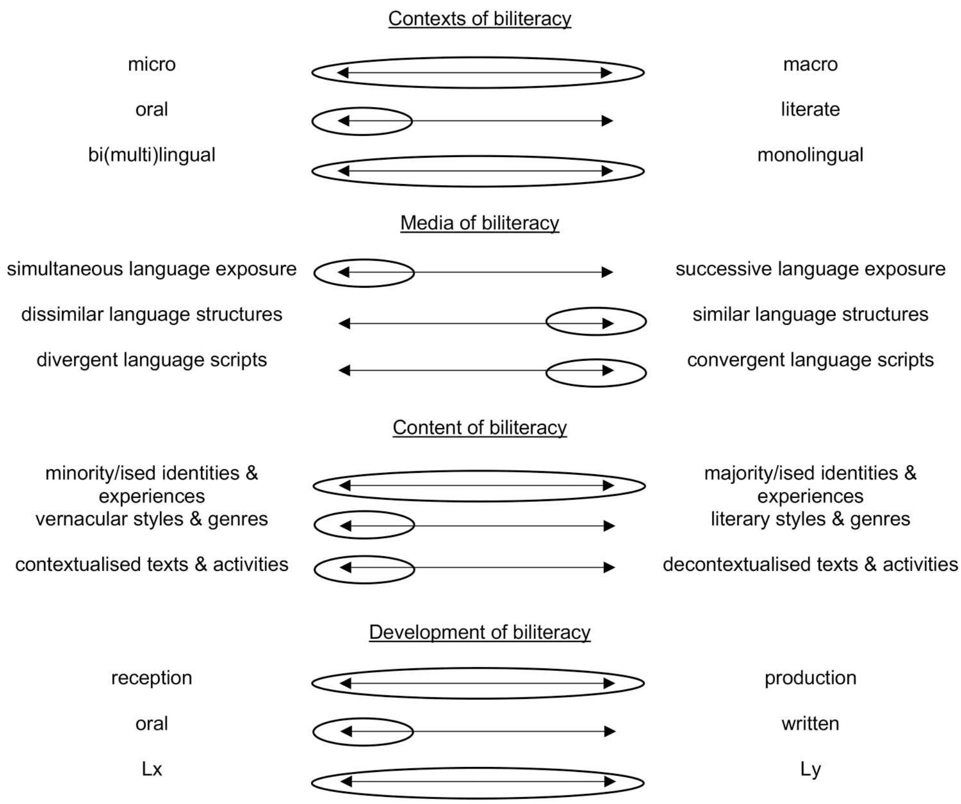
This educator typically asked children to listen to short and simple texts and invited them to label objects, at times in different languages. She translated, switched languages according to the child, asked closed questions, confirmed answers or corrected, repeated, and added information, for instance about the function of an object. Like other professionals in our sample, this educator made many connections between the book and children's experiences, possibly to create a meaningful, enjoyable, and child-centered activity. Like others, she also frequently paraphrased the text to make it easier, based on her understanding that young children may not understand everything. As a result, children rarely encountered longer stretches of written text and tended to engage in short and low-level conversations that rarely touched on the content of a story.

The development of biliteracy occurs in response to communicative demand, along continua of language and literacy skills from **reception to production**, **oral to written**, and **L1 to L2**. The notion of continuum is not meant to suggest development is necessarily continuous or gradual, however. It may in fact occur in fits and starts and with some backtracking (Hornberger, 1989). Applying the continua of development to the non-formal education sector in Luxembourg, means, firstly, that oral productions dominate. Only a few educators, guided by their understanding of literacy as a cultural practice, involved children in writing labels or letters, thereby following the children's lead. Over the course of the academic year, these children took an interest in writing and were observed on several occasions labeling letters, scribbling notes, or writing down the recipe for pancakes after they had made the dish. By contrast, decontextualised opportunities such as those requesting the daily identification of name cards did not appear to further interest in writing (Kirsch & Kemp, 2024; Kirsch, under review).

Secondly, looking through the development lens highlights the use of more than two languages in this example and in ECEC more generally. As noted earlier, many children use one or more languages at home and these languages may differ from the languages they encounter in ECEC (SNJ, 2023). Thus, speaking of L1 and L2 in a context where several languages are used flexibly and fluidly may not make sense. For this reason, we prefer to speak of Lx and Ly, whereby Lx refers to the language (s) a child may use predominantly in the home context and Ly to the language(s) of communication in ECEC.

Impressionistic rendering 3 illustrates the multilingual dialogue between the educator and the child in this oral activity on the dimensions of the continua, showing, for instance, that it afforded drawing on different points of the continua reception to production and Lx to Ly. The educator and some children translanguaged, using gestures as well as home and institutional languages in this multilingual activity. The activity was highly contextualised to children's experiences (content) but children tended to disengage when the educator read more complex language and longer text.

Impressionistic rendering 3. Overview of Example 3. Focus on Development



6.1. Ways of developing languages and literacies

What and how much children 'produced' language and literacy depended greatly on the educators, and the educators' practices, in turn, depended greatly on their own understanding of children's learning. In our observations and interviews, child-centered and teacher-centered pedagogical approaches based on social constructivist, behaviourist, and maturationist learning theories (Hall et al., 2023) influenced the meaning that 'development' took on in the centers. The approach of educators in Example 1 was based on Vygotsky (1978) who argued that children co-construct knowledge with more knowledgeable others who carefully scaffold children's learning in meaningful interactions. The educators developed learning opportunities based on children's interests, competences, and needs in line with social constructivist learning theories and a social practice model of literacy. They aimed to make each child 'a valued and full member of the community' (interview January 2021) and designed activities where children learned to participate in more complex ways and take on increasing responsibility. The perspectives of the children were taken seriously and paid attention to. For instance, when a three-year-old complained that he did not understand the two-year-olds, the educator explained some basics of language development and encouraged him to talk a lot with his younger peers to improve their language skills. Communication was central to these educators. Literacy practices included a variety of materials such as books, letter-shaped candles, signposts, or at times a mobile phone, which they used to engage children in, at times translingual, conversations that had the potential to develop language skills, general knowledge, alphabet knowledge, and phonological awareness. For instance, the open and closed questions, including 'why' questions, encouraged children to participate, guess and share ideas.

While the Vygotskian educators had a systematic approach to developing languages and literacy, this was not the case for the other eight educators. Example 2 is representative of a teacher-centered group, whose practices unfolded within a skills-based model, largely informed by behaviourism. Children tended to listen out for specific words, memorise expressions, answer closed questions, and identify the first letter of their name cards every day. They were not asked to think and speak about a plot, connect stories to their own experiences, or negotiate meaning. Given the repetitive nature of the activities whose level of difficulty did not increase over the course of the year, children's cognitive engagement remained low, and we did not observe any development of children's interests in print or participation in literacy activities.

The same was true for a few educators who favoured a child-centered approach, such as the one in Example 3. Consistent with the national framework (MENJE & SNJ, 2021) and its call for child participation, emphasis on child autonomy, and focus on appropriate materials and spatial organisation, these observed educators appeared to believe that children learn naturally when they are ready and provided with opportunities that afford learning. Reflecting this maturationist view (e.g. Gesell, 1940), they tended to let children play on their own for extensive periods of time. Situations of sharing books or reading stories were short although conversations were framed by children's interests. The national framework portrays children as competent actors on an equal footing with adults, thereby leaving the role of the educator unclear. When engaging children in activities, the educators seemed unaware of learning opportunities arising and, therefore, did not take them up. For instance, children frequently visited a 'fairytale' house richly decorated with scenes from well-known tales, where they played hide-and-seek, but no educator would engage children in conversations about the typical fairy tales or books they had read. Together, these examples show how the educators' understandings of learning shape activities that promote biliteracy.

7. Conclusion

Multilingualism in ECEC in Europe has received relatively little research attention (Alstad & Mourão, 2021) and, as such, our article on multilingual literacy practices addresses a gap and contributes to the field. The application of the continua of biliteracy in heterogeneous ECEC settings in Luxembourg has helped us analyze and understand the complexity of the new multilingual program in ECEC in Luxembourg and highlight areas needing more attention. In this final section, we will review the main reflections and conclude with some implications for professional development, policymakers, and researchers.

7.1. Summary of reflections

The first set of continua, the continua of context, highlights the relevance of the micro–macro dimensions to understand the diversity of practices. The national policy requires all centers to promote multilingualism and all centers have some (emergent) multilingual staff and children. Practices at the micro level, however, differ on account of each center's language profile and staff language competences. Analysis of the media and content of biliteracy showed in Example 2 an activity centered around decontextualised story reading in a locally minoritized language with an unfamiliar script, while Examples 1 and 3 depicted contextualised activities where educators and children translanguaged (to varying degrees) across familiar languages and scripts and drew from across the continuum of majoritized and minoritized experiences. Finally, there are differences in relation to the development of biliteracy. In Examples 1 and 3 but not 2, children used multiple languages in mainly oral communications that asked them to use receptive and productive skills simultaneously. In general, the early childhood educators in Luxembourg as those elsewhere (Hall et al., 2023) focused little on literacy, particularly on writing, possibly on account of the aims of non-formal education, the vagueness of some of the suggestions in the national framework, and the age of the children.

The comparison of the impressionistic renderings indicates that Example 1 offers children the most opportunities to draw from across each and every continuum and, therefore, we argue, this event affords the most opportunities to develop language and literacy. When practices were shaped by sociocultural approaches to language and literacy, like in Example 1, the educators appeared to draw on social constructivist learning theories. By contrast, practices adopting technical and skills-based approaches went together with behaviouristic understandings. The educators' understandings shape their practices and help explain uncertainties when planning language and literacy activities (Hall et al., 2023; Repo et al., 2024).

7.2. Implications

Based on the continua and on our insights into the educators' understandings of languaging, literacy, and learning, we can make a few suggestions for practitioners, professional development (PD) trainers, and policymakers. Firstly, the importance of the micro context and the languages of interaction, highlighted by the continua of context, shows policymakers that one policy, for educators with heterogeneous backgrounds and diverse qualifications in highly diverse centers, cannot fit everybody. More flexibility is needed combined with more (continued) bottom-up work and professional development for educational change to gradually happen as shown in Finland (e.g., Repo et al., 2024). Such training works when it is center-based because the team's collective knowledge, skills, and attitudes can be more relevant than educators' individual beliefs (Lengyel & Salem, 2023). Several studies have confirmed that long-term and inquiry-based PD training in and outside the centers can be effective in helping educators deepen their understanding of learning, change their attitudes, improve skills, become more reflective, and deconstruct and re-conceptualise their role as educators (e.g. Bergeron-Morin et al., 2023). The continua are helpful in identifying specific training needs.

Second, our analysis of the practices along the continua of media and content indicates the need to develop educators' deeper understanding of multilingualism, of translanguaging and of the relationships between language, identity, and power. Implementing innovative and inclusive ECEC policies requires educators to rethink their practices and understandings of learning and teaching. In this way, they may become aware of language ideologies or existing language hierarchies that they may inadvertently reproduce in their setting (Repo et al., 2024). Professional development training on translanguaging pedagogies has been shown to develop knowledge and understanding and contribute to the creation of more inclusive learning environments (e.g. Kirsch et al., 2020; Seltzer et al., 2020). Furthermore, given that the inclusion of children's home languages and translanguaging increase children's participation and engagement (Seltzer et al., 2020) and helps improve their language and literacy skills (Carrim & Nkomo, 2023), professional development on multilingualism and literacies may be necessary to help practitioners embrace new practices. A survey of Australian ECEC professionals has shown that those who reported being more confident and more knowledgeable about language and literacy development were also more likely to engage children in literacy practices (Weadman et al., 2022).

Third, based on the reflections relating to the continua of development, we argue that educators could benefit from strategies or methods that facilitate sustained quality interaction in meaningful literacy activities. They could learn to implement dialogic reading (Whitehurst & Lonigan, 1998) or approaches that emphasise multiliteracies and multimodality and encourage children to draw on their entire semiotic repertoire (e.g. Cope & Kalantzis, 2009; Cummins & Early, 2011). These approaches contribute to children's language and literacy development as well as to their sense of identity. In addition, they help children make connections between the multilingual and multimodal practices they experience in ECEC settings and their community (e.g. Kenner et al., 2004). Working on translanguaging, dialogic reading, and multiliteracies (all in line with sociocultural perspectives on languages and literacy) in teams, potentially helps an increasing number of professionals and centers shift ideologies and practices towards inclusive multilingual education.

Finally, working with the continua had implications for us as researchers. The continua were originally developed at a particular time, in a particular space, and for particular reasons, and have evolved as they have been taken up in other times and spaces across the world (Hornberger, 2022). In this article, we employed the heuristic to analyze practices in ECEC in a multilingual country in Europe. As a result, we asked new questions, offered reflections, and made suggestions. For instance, we recognised that oral activities such as reading or telling stories can be conceptually literate activities; we reflected on the use of L1 and L2 and suggested a broader alternative more inclusive of multilingualism and a heteroglossic perspective; and we acknowledged that our impressionistic renderings of the key moments observed depended on whose perspective one took. Researchers, educators, children, and policymakers see and value different things and, therefore, dialogue is crucial to pave the way for change.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Luxembourg National Research Fund under Grant [C19/SC/13552634], The Ministry of Education, Childhood and Youth and the National Youth Service under the name [COMPARE]. We would like to thank the educators, children and parents and our colleagues Valérie Kemp, Dr Džoen Bebić-Crestany, and Laura Colucci who collected the data. Without them, this work would not have been possible.

Ethics

The research project has been approved by the Ethics Review Panel of the University of Luxembourg under the reference ERP 19-050.

ORCID

Claudine Kirsch http://orcid.org/0000-0001-5981-2773
Nancy H. Hornberger http://orcid.org/0000-0003-4357-6424

References

Aleksić, G., & García, O. (2022). Language beyond flags: Teachers misunderstanding of translanguaging in preschools. *International Journal of Bilingual Education and Bilingualism*, *25*(10), 3835–3848. https://doi.org/10.1080/13670050.2022.2085029

Alstad, G. T., & Mourão, S. (2021). Research into multilingual issues in ECEC contexts: Proposing a transdisciplinary research field. *European Early Childhood Education Research Journal*, *29*(3), 319–335. https://doi.org/10.1080/1350293X.2021.1928845

Barton, D., & Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. Routledge.

Bergeron-Morin, L., Peleman, B., & Hulpia, H. (2023). *Working with multilingual children and families in early childhood education and care (ECEC): guidelines for continuous professional development of ECEC professionals. NESET report, executive summary*. Publications Office of the European Union. https://doi.org/10.2766/031134

Carrim, A., & Nkomo, S. A. (2023). A systematic literature review of the feasibility of a translanguaging pedagogy in the foundation phase. *Journal of Languages and Language Teaching*, *11*(2), 195–210. https://doi.org/10.33394/jollt.v11i2.7158

Cope, B., & Kalantzis, M. (2009). "Multiliteracies": New literacies, new learning. *Pedagogies: An International Journal*, *4*(3), 164–195. https://doi.org/10.1080/15544800903076044

Cummins, J., & Early, M. (2011). Introduction. In J. Cummins, & M. Early (Eds.), *Identity texts the collaborative creation of power in multilingual schools* (pp. 3–19). Trentham Books.

De Houwer, A. (2020). Harmonious bilingualism: Well-being for families in bilingual settings. In S. Eisenchlas, & A. Schalley (Eds.), *Handbook of home language maintenance and development* (pp. 63–83). Mouton de Gruyter.

Englezou, E., & Fragkuli, E. (2014). Literacy in the early years and English as an additional language: The case of a British international school. *Journal of Research in International Education*, *13*(1), 46–62. https://doi.org/10.1177/1475240914528851

García, O. (2023). Translanguaged TESOL in transit. *TESOL Journal*, *10*(1).

García, O., & Otheguy, R. (2020). Plurilingualism and translanguaging: Commonalities and divergences. *International Journal of Bilingual Education and Bilingualism*, *23*(1), 17–35. https://doi.org/10.1080/13670050.2019.1598932

García, O., with Makar, C., Starcevic, M., & Terry, A. (2011). Translanguaging of Latino kindergarteners. In K. Potowski, & J. Rothman (Eds.), *Bilingual youth: Spanish in English speaking societies* (pp. 33–55). John Benjamins.

Gesell, A. (1940). *The first five years of life*. Harper & Brothers Publishers.

Hall, A. H., Gao, Q., Guo, Y., & Xie, Y. (2023). Examining the effects of kindergarten writing instruction on emergent literacy skills: A systematic review of the literature. *Early Child Development and Care*, *193*(3), 334–346. https://doi.org/10.1080/03004430.2022.2090932

Hamman, L. (2018). Translanguaging and positioning in two-way dual language classrooms: A case for criticality. *Language and Education*, *32*(1), 21–42. https://doi.org/10.1080/09500782.2017.1384006

Hélot, C. (2007). *Du bilinguisme en famille au plurilinguisme à l'école*. L'Harmattan.

Hélot, C., & Young, A. (2002). Bilingualism and language education in French primary schools: Why and how should migrant languages be valued? *International Journal of Bilingual Education and Bilingualism*, *5*(2), 96–112. https://doi.org/10.1080/13670050208667749

Hornberger, N. H. (1989). Continua of biliteracy. *Review of Educational Research*, *59*(3), 271–296. https://doi.org/10.3102/00346543059003271

Hornberger, N. H. (1990). Creating successful learning contexts for bilingual literacy. *Teachers College Record: The Voice of Scholarship in Education*, *92*(2), 212–229. https://doi.org/10.1177/016146819009200202

Hornberger, N. H. (2005). Opening and filling up implementational and ideological spaces in heritage language education. *Modern Language Journal*, *89*(4), 605–609.

Hornberger, N. H. (2022). Researching and teaching (with) the continua of biliteracy. *Educational Linguistics*, *1*(1), 108–133. https://doi.org/10.1515/eduling-2021-0004

Hornberger, N. H., & Link, H. (2012). Translanguaging and transnational literacies in multilingual classrooms: A biliteracy lens. *International Journal of Bilingual Education and Bilingualism*, *15*(3), 261–278. https://doi.org/10.1080/13670050.2012.658016

Hornberger, N. H., & Skilton-Sylvester, E. (2000). Revisiting the continua of biliteracy: International and critical perspectives. *Language and Education*, *14*(2), 96–122. https://doi.org/10.1080/09500780008666781

Horner, K., & Weber, J.-J. (2008). The language situation in Luxembourg. *Current Issues in Language Planning*, *9*(1), 69–128. https://doi.org/10.2167/cilp130.0

Kenner, C., Kress, G., Al-Khatib, H., Kam, R., & Tsai, K. C. (2004). Finding the keys to biliteracy: How young children interpret different writing systems. *Language and Education*, *18*(2), 124–144. https://doi.org/10.1080/09500780408666871

Kirsch, C., & Aleksić, G. (2021). Multilingual education in early years in Luxembourg: A paradigm shift? *International Journal of Multilingualism*, *18*(4), 534–550. https://doi.org/10.1080/14790718.2021.1905643

Kirsch, C., Aleksić, G., Mortini, S., & Andersen, K. (2020). Developing multilingual practices in early childhood education through professional development in Luxembourg. *International Multilingual Research Journal*, *14*(4), 319–337. https://doi.org/10.1080/19313152.2020.1730023

Kirsch, C., & Bergeron-Morin, L. (2023). Educators, parents and children engaging in literacy activities in multiple languages: An exploratory study. *International Journal of Multilingualism*, https://doi.org/10.1080/14790718.2023.2195658

Kirsch, C., & Kemp, V. (2024). Making sense of writing: Infants' experiences in a multilingual day care centers in Luxembourg. In I. Papadopoulos, & T. Hathaway (Eds.), *Multilingual early childhood education: Modern approaches and research*. https://doi.org/10.52305/XYLP7011

Kirsch, C. (under review). Dialogic reading.

Lengyel, D., & Salem, T. (2023). Investigating team beliefs on multilingualism and language education in early childhood education and care. *International Journal of Multilingualism*, *20*(1), 31–49. https://doi.org/10.1080/14790718.2022.2125976

Mary, L., & Young, A. (2017). Engaging with emergent bilinguals and their families in the pre-primary classroom to foster well-being, learning and inclusion. Language and Intercultural Communication, 17(4), 455–473.

[MENJE] Ministry of national Education, Childhood and Youth. (2022). Education system in Luxembourg: Key figures School year 2019-2020 https://men.public.lu/fr/publications/statistiques-etudes/themes-transversaux/19-20-enseignement-chiffres.html.

[MENJE] Ministry of National Education, Childhood and Youth & [SNJ] National Youth Service. (2021). Cadre de référence national sur l'éducation non formelle des enfants et des jeunes. https://www.enfancejeunesse.lu/fr/cadre-de-reference-national/.

Mortimer, K., & Hornberger, N. H. (2023, September 26). Critical biliteracies without borders: Translanguaging and culturally sustaining approaches. In *Research to policy webinar series*. Center for Applied Linguistics.

Neumann, S. (2015). Lost in translanguaging? Practices of language promotion in Luxembourgish early childhood education. *Global Education Review*, *2*(1), 23–39.

Poza, L. E. (2017). Translanguaging: Definitions, implications, and further needs in burgeoning inquiry. *Berkeley Review of Education*, *6*(2), 101–128.

Purschke, C. (2017). Crowdsourcing the linguistic landscape of a multilingual country. Introducing Lingscape in Luxembourg. *Linguistik Online*, *85*. https://doi.org/10.13092/lo.85.4086

Reiff, P., & Neumayer, J. (2019). Le luxembourgeois reste à langue la plus utilisée à domicile. In STATEC (Ed.), *Regards Vol. 9*. https://statistiques.public.lu/fr/publications/series/regards/2019/regards-09-19.html#:~:text=utilisée%20à%20domicile-,N°%2009%2F2019%20%2D%20Le%20luxembourgeois%20reste%20la%20langue%20la,nombre%20au%20travail%20(78%25).

Repo, E., Aerila, J.-A., Tyrer, M., & Harju-Luukkainen, H. (2024). Multilingual learning environments in early childhood education in Finland. *Journal of Early Childhood Education Research*, *13*(1), 221–248. https://doi.org/10.58955/jecer.129339

Sanders-Smith, S. C., & Dávila, L. T. (2019). Progressive practice and translanguaging: Supporting multilingualism in a Hong Kong preschool. *Bilingual Research Journal*, *42*(3), 275–290. https://doi.org/10.1080/15235882.2019.1624281

Schreyer, I., Oberhuemer, P., & Kirsch, C. (2024). Luxembourg – Key contextual data. In P. Oberhuemer, & I. Schreyer (Eds.), *Early child-hood workforce profiles across Europe. 33 country reports with key contextual data*. State Institute for Early Childhood Research and Media Literacy. www.seepro.eu/English/Country-Reports.htm.

Seedhouse, P. (2005). Conversation analysis and language learning. *Language Teaching*, *38*(4), 165–187. https://doi.org/10.1017/S0261444805003010

Seltzer, K., Ascenzi-Moreno, L., & Aponte, G. Y. (2020). Translanguaging and early childhood education in the USA: Insights from the CUNY-NYSIEB project. In J. A. Panagiotopoulou, L. Rosen, & J. Strzykala (Eds.), *Inclusion, education and translanguaging* (pp. 23–39). Springer VS.

Sembiante, S. F., Restrepo-Widney, C., Bengochea, A., & Gort, M. (2023). Sustainable translanguaging pedagogy in support of the vulnerable language: Honoring children's ways of 'showing' and 'telling' in an early childhood dual language bilingual education program. *International Journal of Bilingual Education and Bilingualism*, *26*(8), 928–942. https://doi.org/10.1080/13670050.2022.2161814

[SNJ] Service National de la Jeunesse. (2023). Enquête: la diversité linguistique des jeunes enfants et les pratiques langagières au sein des familles au Luxembourg [Survey: the linguistic diversity of young children and language practices within families in Luxembourg]. https://men.public.lu/dam-assets/catalogue-publications/langues/luxembourgeois/brochure-snj-diversite-linguistique.pdf.

Street, B. V. (1995). *Social approaches to literacy in development, ethnography and education*. Routledge.

Thieme, A. M. M., Hanekamp, K., Andringa, S., Verhagen, J., & Kuiken, F. (2022). The effects of foreign language programmes in early childhood education and care: A systematic review. *Language, Culture and Curriculum*, *35*(3), 334–351. https://doi.org/10.1080/07908318.2021.1984498

Vygotsky, L. (1978). M. Cole, & S. Scribner (Eds.), *Mind in society: The development of higher psychological processes*. Harvard University Press.

Weadman, T., Serry, T., & Snow, P. C. (2022). The oral language and emergent literacy skills of preschoolers: Early childhood teachers' self-reported role, knowledge, and confidence. *International Journal of Language and Communication Disorders*, 154–168.

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, *69*(3), 848–872. https://doi.org/10.1111/j.1467-8624.1998.tb06247.x