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REVIEW AND SYNTHESIS

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Translanguaging within and across learning settings: A systematic review focused on multilingual children with a migration background engaged in content learning

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Abstract

This systematic review aims to take stock of the current knowledge regarding the possible processes, challenges, favourable conditions, and potential for change involved in translanguaging within and across learning settings in the case of multilingual children with a migration background engaged in disciplinary content learning. This study includes 94 publications identified and selected following the PRISMA guidelines. The results point towards seven constitutive and leveraging processes involved in translanguaging. Constitutive processes refer to processes through which translanguaging practices can be enacted (i.e., combining linguistic features attributed to different named languages; employing semiotic features multimodally; translating; comparing). Leveraging processes are processes through which such practices can be promoted (i.e., collaborating; brokering; designing a multilingual linguistic landscape). Furthermore, both challenges to and favourable conditions for translanguaging in in-school and out-of-school settings are linked to efforts to maintain and challenge the prevalent monolingual norm at the level of policies, institutions, educators, children, and caregivers. Finally, building on a boundary-work lens, we show that translanguaging involves significant potential for change, establishing continuity across

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learning settings for multilingual children with a migration background; however, this continuity emerges in a dynamic interplay with discontinuities for institutional settings and even children themselves.

KEYWORDS
boundary work, migration, multilingualism, translanguaging

Context and implications

Rationale for this study: Translanguaging has been proposed as a solution to the challenges encountered by multilingual children with a migration background in education, but a systematic exploration of this approach is lacking.
Why the new findings matter: The identification of processes, challenges, favourable conditions, and potential for change involved in translanguaging provides key insights for its further operationalisation.
Implications for policy makers, practitioners and researchers: This review offers a systematised and nuanced mapping of the potential involved in translanguaging for multilingual children with a migration background. It does so by highlighting the need to consider all agents' perspectives as well as the socio-historical embeddedness of language practices and choices in (institutional) learning settings. Furthermore, this study provides a detailed account of the processes, challenges, and favourable conditions involved in translanguaging with home languages and the language(s) of instruction, serving as a potential guide for operationalising such a pedagogical approach, particularly in formal, mainstream educational settings. The review also highlights directions for future research.

INTRODUCTION

The voices, experiences, and worldviews of multilingual children with a migration background[1] are often marginalised during their learning trajectories (e.g., Blackledge, 2001; Mallinson, 2024; Rojo, 2010). Moreover, this group of children may face the 'double challenge' of acquiring disciplinary content in a mainstream language[2] which they are also simultaneously learning (Karlsson et al., 2019; Nygård Larsson & Jakobsson, 2017). Such inequality is partly brought forth by the monolingual norm which often characterises mainstream education, despite the multilingual reality of many people and societies across the world (e.g., Asfaha et al., 2023; Jonsson, 2017). Involving a strict separation between the language of instruction and children's home languages,[3] this norm is usually linked to a deficit perspective on children's abilities and to a decapitalisation of home languages in institutional spaces (e.g., Cummins, 2000; Gogolin, 2021; Martin-Jones, 2007). In contrast, translanguaging emphasises home languages as potential resources in children's learning trajectories (e.g., Cenoz & Gorter, 2014; García, 2009). This systematic review aims to take stock of the current knowledge regarding the possible processes, challenges, favourable conditions, and potential for change involved in translanguaging within and across learning settings in the case of multilingual children with a migration background engaged in disciplinary content learning.

Translanguaging: Origins and overview

The notion of translanguaging emerged in the midst of Welsh revitalisation efforts as a pedagogical strategy involving the use of two named languages in input and output (Baker, 2011; Lewis et al., 2012a, 2012b; Williams, 1994). This construct was expanded following the 'multilingual turn' in sociolinguistics, an attempt to move beyond an understanding of language as a natural, fixed, bound object (Conteh & Meier, 2014; May, 2014). Although numerous notions emerged concurrently (e.g., codemeshing, polylingual languaging, metrolingualism, transglossia), translanguaging has developed most substantially (Straszer et al., 2022). Work carried out in the USA and UK led to a broader understanding of translanguaging as a linguistic practice, a pedagogical approach, a theoretical construct, and a civil rights stance promoting social justice (e.g., Creese & Blackledge, 2015; García, 2009). Questioning the boundaries between named languages, translanguaging builds on the idea that speakers draw on a single linguistic repertoire (e.g., Creese & Blackledge, 2015; García & Kleifgen, 2020). As a linguistic practice, it involves primarily linguistic alternation between named languages at the level of orality and literacy, but it also 'build[s] upon interdependence across modalities' (Poza, 2017, p. 117). As a pedagogy, translanguaging promotes the use of linguistic practices involving all learners' linguistic resources to support learning (García & Li, 2014a). It is considered to have transformative potential, reducing inequities in education for minoritised groups (e.g., García, 2009; Heugh, 2021).

The notion of translanguaging has been criticised for various reasons. While a complete and in-depth account of such critiques is beyond the remit of this article, here we pinpoint two key aspects. First, some authors question the polysemic use of the term (e.g., Jaspers, 2018; Jaspers & Madsen, 2019), highlighting that there is currently little consensus over the conceptualisation of translanguaging and the processes through which it is enacted (Bonacina-Pugh et al., 2021). Second, there are also doubts regarding the transformation claims involved in translanguaging as a pedagogy. Some authors argue that while translanguaging might be experienced as transformative by some learners, it 'can no longer be understood as "a universally empowering educational practice"' (Mendoza et al., 2023, pp. 2–3); additionally, empirical doubts over causal relations have also been expressed (e.g., Block, 2018; Bonacina-Pugh et al., 2021; Jaspers, 2018).

Despite these critiques, the pedagogy of translanguaging has been operationalised across the world in a variety of educational programmes: mainstream classrooms; higher education; foreign language education; immersion education; heritage and minority education; and content and language integrated learning (Bonacina-Pugh et al., 2021). However, such linguistic and pedagogical practices are embedded in different dynamics of linguistic diversity which depend to a certain degree on the political and economic division between the Global South and the Global North (Asfaha et al., 2023; Bonacina-Pugh et al., 2021; Heugh, 2021). In southern schools, long characterised by multiple forms of societal, local, and individual multilingualism, translanguaging is partly shaped by colonial and postcolonial histories and hierarchies (Heugh, 2021). In contrast, the linguistic diversity present in northern schools, primarily in mainstream classrooms, stems largely from transnational migration (Bonacina-Pugh et al., 2021; Heugh, 2021); translanguaging in the latter settings thus involves languages with radically different statuses: the usually national, mainstream languages of instruction and the often minoritised home languages linked to migration.

While sharing some commonalities, the operationalisation of translanguaging in these educational programmes and geo-political settings can involve significantly different processes, challenges, favourable conditions, and outcomes depending on the 'contextual differences regarding the medium of instruction, language, societal and educational aims' (Cenoz, 2017, p. 193). Consequently, it is fundamental 'to be wary of lumping all forms of translanguaging together' (Block, 2018, p. 16); instead, we need to consider the socio-historical context,

the status of the named languages, and the type of educational settings when exploring the dynamics of translanguaging (Canagarajah, 2011a; Cenoz, 2017; Mendoza et al., 2023; Prilutskaya, 2021; Zavala, 2019).

Here we focus specifically on translanguaging that involves the home languages of multilingual children with a migration background as they navigate monolingual mainstream schools and out-of-school learning settings. We understand this case as a sub-field of inquiry in light of the specific language hierarchies that emerge between home languages and the languages of instruction in institutional settings, as well as the consequent structural disadvantages that these children may experience across their learning trajectory. As transnational migration is on the rise, researchers, policy makers, and practitioners are considering translanguaging as a potential pedagogical approach in superdiverse classrooms. However, given the history of translanguaging, most claims are made based on the enactment of such practices and pedagogical approach in learning settings characterised either by the presence of regional minority languages (e.g., Wales, the Basque country) or officially bilingual learning settings (e.g., the USA). Research conducted in these settings is not necessarily generalisable to the case of multilingual children with a migration background in mainstream education. Although this approach is discursively believed to hold a lot of promise for this group, there is currently a lack of systematic synthetisation of the relevant available research. Some key questions that emerge are: What forms and shapes does translanguaging have in such contexts? What prevents and levers it in these learning settings? How can it help this specific group? Carrying out a systematic review is a way of proposing answers to these questions based on a synthesis of the currently available literature.

Linguistic diversity and migration: educational tensions between a monolingual norm and translanguaging

Gogolin (1997, 2011, 2021) suggests that, despite the multilingual reality of learners, some of today's education systems can still be characterised by a so-called 'monolingual habitus', defined as 'the deep-seated habit of assuming monolingualism as the norm in a nation' (Gogolin, 1997, p. 41). When encountering multilingualism due to migration, many schools, especially those in the Global North, reproduce a monolingual norm characterised by strict language separation: the mainstream language is legitimised for both learning and social integration while home languages are relegated to the private realm (e.g., Duarte, 2019; Martini & Torregrossa, 2023).

A monolingual norm may place multilingual children with a migration background at a disadvantage, albeit not deliberately (Gogolin, 2011). These children are often formally and informally assessed through a deficit lens: perceived as 'lacking' language (e.g., Menken, 2013; Rosa, 2019), they are at a higher risk of being tracked at lower levels of education, placed in repeat classes, or special education (Cataldo-Schwarzl, 2022). Furthermore, they may face the double challenge of learning (new) content through a language they are still acquiring (e.g., Nygård Larsson & Jakobsson, 2017; Seilstad & Kim, 2020). Consequently, they may experience difficulties in following instructions, making sense of new concepts, acquiring subject-specific registers, or demonstrating previously or newly acquired (subject-specific) knowledge (e.g., Bonomi, 2020; Le Pichon et al., 2021). Additionally, in this context home languages often hold a lower status than the language of instruction, particularly when intersected with aspects such as socioeconomic status, nationality, race, or religion (e.g., Blommaert et al., 2006; Van Der Wildt et al., 2015). Children often internalise this linguistic hierarchy (Moraru, 2019), perceiving their home languages as 'lacking any didactic capital' (Van Der Wildt et al., 2015,

p. 171), or their literacy practices as inferior (Daniel & Pacheco, 2016). Simultaneously, culturally and linguistically embedded forms of knowing disciplinary content can become delegitimised against the mainstream ones, silencing children whose home language is not the language of instruction (Chronaki et al., 2022). This may lead to feelings of exclusion and demotivation (Cunningham & Little, 2022; Dávila & Bunar, 2020). Consequently, while the dynamics of inequality faced by this group are embedded in an intersection of multiple aspects, a monolingual norm may play a significant role in a potentially lower academic achievement and emotional well-being of multilingual children with a migration background (e.g., Fry, 2007; Yilmaz, 2021).

Challenging the monolingual norm and a subtractive approach to bilingualism, translanguaging represents an additive orientation (Cummins, 2019) which encourages the use of home languages alongside mainstream ones. For multilingual children with a migration background, the transformative potential of translanguaging refers to it acting as a bridge between home, school and out-of-school learning settings, closing the gap between their 'different life-worlds' (Ticheloven et al., 2021, p. 3). As such, bringing home languages in institutional settings is claimed to change the negative consequences of the monolingual norm mentioned above. In disciplinary content classrooms,[4] such practices are held to substantially enhance access and engagement with subject-specific content, while challenging unequal social structures and shaping learners' bilingual subjectivities (e.g., Afitska, 2020; García & Leiva, 2014; Le Pichon et al., 2021). Although less researched, translanguaging practices in out-of-school settings, such as museums or library science programmes, are also linked to similar benefits (e.g., Kwon, 2022; Ryu, 2019).

However, many questions arise regarding translanguaging within and across learning settings in the case of multilingual children with a migration background. Such linguistic practices and pedagogical approaches pose specific complexities which still need to be systematically mapped out (e.g., French, 2016; Kim & Choi, 2021; Pierson et al., 2021).

Translanguaging: Previous reviews

The existing reviews of translanguaging focus on: synthesising how this notion has been defined and exemplified (Bonacina-Pugh et al., 2021; Chaka, 2020; Conteh, 2018; Poza, 2017); outlining the learning contexts in which it has been operationalised (Bonacina-Pugh et al., 2021; Özkaynak, 2023; Prilutskaya, 2021); or describing general research trends (Xin et al., 2021). A more specific cluster of reviews are linked to English teaching and learning. Prilutskaya (2021) focuses on the affordances of translanguaging pedagogies in relation to English teaching and learning in general, and Huang and Chalmers (2023) explore the effects of translanguaging interventions for learning English as a foreign language (EFL). Lu et al. (2023) analyse translanguaging in educational programmes which employ English as a medium of instruction (EMI) and content and language integrated learning (CLIL), while Hopkyns and Hillman (2024) focus on translanguaging in EMI in higher education in six Gulf Cooperation Council countries. Another cluster of reviews pays attention to the relationships between translanguaging and literacy development. Machado (2017) examines how teachers may foster diverse literacy practices in early childhood education through translanguaging, biliteracy and culturally sustaining pedagogies. Similarly, Salmerón (2022) focuses on the potential of translanguaging for developing the writing practices of elementary multilingual children. Shank Lauwo (2021) examines the implications of multiliteracies and translanguaging in language and literacy education in Africa. An emerging cluster focuses on different geo-political settings: Asfaha et al. (2023) explore translanguaging pedagogies in the Global South, while Fuster and Bardel (2024) provide a critical review of translanguaging

in Sweden. Finally, Bosma et al. (2023) focus on how translanguaging may support the development of the bilingual lexicon.

These reviews provide a rich overview of how translanguaging has been conceptualised, defined and operationalised in different learning settings, with different groups and in different geographical locations. However, what is currently lacking is a synthesis of studies that examine translanguaging involving the home languages of multilingual children with a migration background in mainstream education, particularly as they engage in learning content in and across different learning settings. As argued above, we consider this case a sub-field of inquiry due to the consequences of specific languages dynamics on the learning trajectory of this group. Previous reviews do not offer answers to the most pressing questions regarding this group and settings, such as: the forms translanguaging can take in such settings, the obstacles and the levers to implementing such an approach, or its potential for these children. Furthermore, the vast majority of the current reviews focus more or less directly on different facets of language learning. Given the 'double challenge' experienced by this group in education (learning content through a language that they are also simultaneously learning), it is necessary to systematise the available information regarding the use of translanguaging for content learning involving the home languages of children with a migration background.

The present study

Aim and research questions

This systematic review aims to identify, synthesise and analyse the possible processes, challenges, favourable conditions, and potential for change involved in translanguaging within and across learning settings in the case of multilingual children with a migration background engaged in content learning. The study has three focal points.

First, it concentrates on translanguaging involving home languages linked to transnational migration. Given the importance of considering the status of the named languages when exploring translanguaging (Canagarajah, 2011a; Cenoz, 2017; Mendoza et al., 2023; Zavala, 2019), we highlight that such languages enter specific dynamics with the mainstream languages in institutional settings, leading to their (partial) minoritisation. Although admittedly broad and complex, this category represents a fruitful common denominator when attempting to throw light on the particularities of translanguaging in the case of multilingual children with a migration background.

Second, the review focuses on translanguaging connected to disciplinary content learning and teaching, therefore excluding studies centred solely on language learning and teaching. For multilingual children with a migration background this has become a key area of interest due to the 'double challenge' of simultaneously learning a new language and subject matter through that language (Cummins, 2008; Nygård Larsson & Jakobsson, 2017) as well as dealing with epistemological differences (Chronaki & Planas, 2018; Ryan et al., 2021).

Third, the review synthetises studies focused on translanguaging within and across different learning settings. While translanguaging is historically linked to schooling (Conteh, 2018; Duarte, 2019), this review responds to the call for expanding the research to out-of-school learning settings, such as the home or community contexts (Axelrod & Cole, 2018; Back, 2020; McCarthey et al., 2020; Prilutskaya, 2021).

Focusing on translanguaging within and across learning settings in the case of multilingual children with a migration background engaged in content learning, we address the following research questions:

(i) What processes are involved in translanguaging?
(ii) What challenges may hinder translanguaging?
(iii) What are favourable conditions for translanguaging?
(iv) What potential for change does translanguaging hold?

A boundary-work lens

To better comprehend the potential for change that translanguaging holds, which is relevant for our fourth research question, we use a boundary-work lens building primarily on Akkerman and Bakker (2011). These authors suggest that boundaries imply discontinuities in action and interaction across different settings and practices. For multilingual children with a migration background a monolingual norm in institutional settings can represent a boundary. When schools and other learning settings establish the mainstream language in society as the only legitimate one, these children may experience discontinuities in language practices and learning. For example, as seen above, they may not have the opportunity to express previous knowledge learned in the home language at school. Such discontinuities put them at a disadvantage compared to peers whose home language matches the school language.

In this context, translanguaging has been directly and indirectly interpreted as a form of boundary crossing. Boundary crossing refers to ways of '(re-)establishing continuity' in action and interaction (Akkerman & Bakker, 2011, p. 152). Having been characterised as softening, challenging, pushing or breaking linguistic boundaries (e.g., Charamba, 2022; Creese & Blackledge, 2015; García & Lin, 2017), translanguaging is held to have the potential to change or transform the lived realities of multilingual children by establishing continuity in language practices in and across learning settings, enhancing their academic achievement and emotional well-being. However, this focus on continuity is often rooted in an understanding of translanguaging practices as 'released … from social external conventions' (García & Li, 2014b, p. 23), and not subject to language hierarchies (García, 2009, p. 78). Various authors advocate instead an examination of translanguaging as emerging in contexts characterised by specific socio-historical conditions (Canagarajah, 2011b; Lee, 2015; Mendoza et al., 2023).

When examining the potential for change held by translanguaging, it is important to look beyond a mere process of (re-)establishing continuity. Building on Gieryn (1983, 1999), Fisher (1989), Thompson Klein (1996, 2021), and Akkerman and Bakker (2011), we understand boundary work as encompassing the ongoing efforts involved in boundary creation, maintenance, and crossing. By focusing on boundary work more broadly, we argue that discontinuities in one direction may simultaneously imply continuities in other directions (and vice versa) and that boundaries are neither given nor fixed (Akkerman & Bakker, 2011). This lens invites considering whether the potential continuity involved in translanguaging might also lead to or even require the potential creation of new boundaries and discontinuities given that such practices are embedded in particular socio-historical conditions. This allows a more nuanced understanding of the potential for change involved in translanguaging.

METHOD

This systematic review followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines for identifying and selecting publications (Page et al., 2021).

Databases and search strategy

The search was conducted in February 2023 in six databases: Scopus, WoS, ERIC, APA PsycInfo, SciELO, EBSCO Sweden. In the first four databases, the search terms employed were *"(translang*) AND (pedagog* OR educat* OR learn* OR teach*)"*. Given the limited scope of the last two databases, we focused only on the notion of translanguaging, also using translated versions of the root word in the corresponding languages: "*translang* OR transleng* OR transling**" (SciELO) and "*transspråk**" (EBSCO Sweden). Three filters were applied across all databases when possible: (1) search terms to be found in the title, abstract or keywords; (2) peer reviewed articles and chapters; (3) languages of publications: English, Spanish, Portuguese, French, Romanian, German, Swedish (see Supporting Information File 1 for all search strings). We chose to include only peer-reviewed publications with the aim to ensure a core level of quality, given that such publications are usually (blindly) reviewed by at least two researchers as well as the editorial teams involved in the publishing process. We did not limit the year of publication in our search in an attempt to include the broadest possible array of relevant literature. The total number of records was first deduplicated using Endnote; subsequently, the first author marked and removed the rest of the duplicates manually employing an Excel spreadsheet.

Inclusion and exclusion criteria

A screening protocol with ten inclusion and exclusion criteria was designed (see Table 1).

Screening

The screening consisted of two phases and was carried out using an Excel spreadsheet. First, all publications included after deduplication were manually screened based on their title, abstract and keywords. The main author reviewed all publications, while the fourth author reviewed a part of the publications ($n = 100$) independently for inter-rater reliability purposes. The two reviewers then compared their results and resolved the disagreements together. Cohen's kappa was 0.82 which demonstrates excellent inter-rater reliability. Throughout the entire process, the first author also discussed specific cases with the second and third author.

Second, all publications retrieved were screened for eligibility based on the entire text. The first author reviewed the total number of studies. This was done in collaboration with the second author when there was a lack of clarity over one or various inclusion criteria.

Quality assessment

Initially, the main criterion that was employed to ensure a base level of quality was that the included publications should have appeared in peer-reviewed journals or books indexed in one or more of the six databases mentioned above. Additionally, we carried out a quality assessment check for all included publications. For this process, five key criteria were employed:

(i) there is congruity between the research methodology and the research question/objectives;
(ii) there is congruity between the research methodology and the data collection methods;

TABLE 1 Inclusion and exclusion criteria.

#	Criterion	Include	Exclude
1	Languages of the publications	English, Spanish, Portuguese, French, Romanian, German, Swedish	Other languages
2	Type of publications	Empirical, peer-reviewed articles or book chapters	Other publications (e.g., conceptual articles or book chapters; non-peer reviewed publications; MA or PhD theses; book reviews, position papers; reviews; book introductions; introductory articles to special issues; conference proceedings; other grey literature)
3	The main phenomenon/practice, conceptual framework OR pedagogy discussed	Translanguaging	Other notions (e.g., multilingualism, plurilingualism, bilingualism, code-switching, polylanguaging)
4	Learning settings	In-school and out-of-school learning settings (within and across) (e.g. school, home, museum)	Other settings (e.g., social media, healthcare, markets, workplace, places of worship)
5	Language status	Home languages linked to migration processes. Other terms: minority/(im)migrant/community languages, mother tongues, etc.	• Other minority languages or dialects not linked to migration (e.g. Frisian) • Other languages not linked to migration (e.g. EFL)
6	Children' migration generation	Pertaining to any of migration generation (e.g., 1, 1.5, 2, 3)	Not pertaining to any migration generation
7	School levels According to the UNESCO International Standard Classification of Education	Primary, lower secondary, upper secondary education. (levels 1–3)	• Early child education (level 0) • Post-secondary, tertiary, higher education (levels 4–8)
8a	In-school subjects and language	Language as a medium of instruction (e.g. history, mathematics) • focus on teaching and learning content through the medium of specific language practices in in-school subjects. • focus on content in a more indirect way: (1) language policy at school level; (2) educational interventions at school level	Language as an object of instruction: • foreign language classes—EFL, TEFL, EMI, ELT, etc. • second/third language classes—ESOL, ESL, NT2, ELE, etc. • heritage/community language classes • literacy (classes), directly or indirectly linked to second/third or heritage language classes. Here literacy is understood in its broadest form. Exception: disciplinary literacy (falls under the category formal education—subjects: language as a medium of instruction)

(Continues)

TABLE 1 (Continued)

#	Criterion	Include	Exclude
8b	Out-of-school subjects and language	Language as a medium of instruction (e.g., biology, Islamic studies, cooking)	Language as an object of instruction • minority/community/heritage language classes in community centres, mosques, etc. • language maintenance/learning in the home setting • literacy (classes), directly or indirectly linked to heritage language classes or language maintenance/learning at home
9	Home language status in in-school settings	Not an official language of instruction • monolingual education programmes • bi-/trilingual education programmes where the home language of pupils with a migration background is not one of the languages of instruction	An official language of instruction • bilingual education programmes where the home language of the pupils with a migration background is one of the official languages of instruction
10	Focus on the perceptions and practices of	• Caregivers and/or • Children and/or • In-service educators with focus on in-school practices and/or • In-service and pre-service educators involved in teacher education with focus on in-school practices	In-service and pre-service educators involved in teacher education with no focus on in-school practices

(iii) there is congruity between the research methodology and data analysis;
(iv) there is congruity between the research methodology and the interpretation of results;
(v) the conclusions drawn in the research report flow from the analysis/interpretation of the data.

These criteria correspond to a selection of the elements included in the JBI Critical Appraisal Checklist for Qualitative Research (Aromataris et al., 2024). We selected these five criteria as they can account for congruity across the entire research sequence. This process was carried out by the first and fourth author: each author independently assessed half of the publications. Cases of uncertainty expressed by the fourth author were also assessed by the first author, who made the final decision. A table with the final results is available on Open Science Framework (OSF).

Coding and analysis

The full text of the publications was qualitatively examined using NVivo 14 and guided by thematic analysis (Braun & Clarke, 2006). Two types of data were extracted from each publication: (i) identifying information (e.g., country); and (ii) details that could serve answering the research questions. For the latter, a two-cycle coding process was chosen (Miles et al., 2013; Saldaña, 2013), which roughly corresponds to the six phases of thematic analysis suggested by Braun and Clarke (2006).

The first cycle consisted of familiarising ourselves with the data and generating initial codes (Braun & Clarke, 2006). This involved combining both deductive and inductive coding. Deductive coding, generated following the research questions, led to four key codes: (1) processes; (2) challenges; (3) favourable conditions; and (4) potential for change. Each code was then divided in two configurations of learning settings: school and out-of-school. Afterwards, inductive coding and sub-coding was carried out with a focus on the results, discussion, and conclusion of each publication. The second cycle involved searching for themes, reviewing themes, defining, and naming themes (Braun & Clarke, 2006, p. 87). The coding scheme can be accessed on OSF.

RESULTS

The search generated 2983 records. After deduplication, there was a total number of 1569 records which were screened in the first phase. Following this screening, 152 publications entered the second phase. Given that 7 publications were not retrieved, 145 were screened in the second phase. A total of 94 publications were included in this systematic review (see Table 2). Figure 1 provides the PRISMA flow diagram which accounts for the search and screening results.

All publications were deemed of sufficient quality to be included. Out of 94 studies, 87 fulfilled all five key criteria. The other seven studies were not fully transparent about at least one key criterion—for example, how the data was analysed (1, 13, 32, 36, 57)—or were less conventional in terms of academic style and reporting (9, 52). These seven studies did bring forward relevant and insightful information, but we did not draw any major conclusions solely based on any of them.

Most studies were conducted in schools (86 out of 94) with mainstream monolingual programmes and characterised by linguistic heterogeneity at classroom level (79 out of 86). Out-of-school studies (8) and across school and out-of-school studies (4) included after-school programmes, libraries, museums, faith schools, and homes. Most were geographically

TABLE 2 Full list of reviewed publications.

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
1	Afitska (2020)	England	School	P	4	25 students, 15 teachers	Interviews; artefacts	2 academic years	No
2	Alisaari et al. (2019)	Finland	School	P+S	n/a	820 teachers	Mixed methods: survey	n/a	No
3	Anderson et al. (2022)	USA	School	S	2	27 teachers	Classroom observations; informal conversations; surveys, artefacts, test scores	5 years	No
4	Ascenzi-Moreno et al. (2016)	USA	School	P+S	3	5 school leaders	Observations of conversations with school leaders; leadership team meetings; classroom observations	1 year	Yes
5	Blair (2016)	USA	Across school, home and after-school programmes	P	1	6 students, 6 parents, 4 teachers	Multiple instrumental case study design using ethnographic field methods: interviews; home and classroom observations; informal conversations; artefacts	8 months	Yes
6	Bonomi (2020)	Italy	School	S	1	2 teachers	Action research and ethnographic approach: teacher reflections and observations	1 academic year	No
7	Camenzuli et al. (2023)	Malta	School (Multilingual)	P	6	21 teachers	Mixed methods: Q methodology; focus group interviews	n/a	Yes
8	Carbonara and Scibetta (2022)	Italy	School	P	2	122 students	Focus groups	18 months	No
9	Castro (2021)	USA	School	P+S	?	1 teacher	Autobiographical /Educator self-reflections	n/a	No
10	Cataldo-Schwarzl (2022)	Austria	School	P+S	2	43 students, 2 teachers	Mixed methods: surveys; classroom observations; interviews	6 months	Yes

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
11	Choi (2022)	USA	Museum	n/a	n/a	1 child, 1 parent	Museum visit observations; video recordings; interviews; informal discussions	18 months	Yes
12	Christensen (2022)	Denmark	School	S	2	15 focal students, teachers	Classroom observations; photos; videos; artefacts	1 month	No
13	Chronaki et al. (2022)	Sweden	School	S	1	1 teacher, students	Classroom observations; interviews	n/a	Yes
14	Civil and Quintos (2022)	USA	Family mathematics workshops	n/a	n/a	3 mothers, 3 children	Video recordings; interviews	2 years	Yes
15	Cunningham and Little (2022)	England	School	P	n/a	40 teachers	Interviews	n/a	Yes
16	D'warte (2020)	Australia	School	P	1	29 students	Classroom observations and audio-recordings; interviews; focus-group interviews; language maps	5 months	No
17	Daniel and Pacheco (2016)	USA	Across school and after-school programmes	S	2	4 students	Classroom observations and video recording; interviews; focus groups	2 weeks	No
18	Daniel (2018)	USA	Across school and after-school programmes	S	1	16 students	Ethnographic design: classroom observations, video-recordings, audio-recordings; interviews; photographs	6 months	No
19	Daniel and Zybina (2019)	USA	Across school and after-school programmes	S	1	9 students	Interviews	2 years	Yes

(Continues)

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
20	David et al. (2022)	USA	School	S	1	4 teachers	Video recordings; interviews; artefacts	1 academic semester	Yes / teacher training
21	Dávila and Bunar (2020)	Sweden	School	P+S	n/a	20 multilingual teaching assistants	Interviews	3 years	Yes
22	de Ríos (2018)	USA	School	S	1	8 students	Classroom observations; focus groups; writing assignments	1 academic year	No
23	Degano and Kirsch (2020)	Luxembourg	School (Multilingual)	P	1	1 student	Ethnographic research methods: classroom observations and video-recordings; interviews; stimulated recall interviews	20 days	No
24	Deroo (2020)	USA	School	P+S	n/a	5 teachers	Teacher discussion posts; final projects; artefacts	16 weeks	No
25	Deroo and Ponzio (2019)	USA	School	S	1	1 teacher, 19 students	Ethnographic research methods: classroom observations; interviews; documents; artefacts	5 months	Yes / Teacher training
26	DiNapoli and Morales (2021)	USA	School	S	1	7 students, 1 teacher	Classroom observations and video recordings; interviews; artefacts	6 weeks	No
27	Duarte (2019)	Germany	School	S	4	51 students, 4 teachers	Mixed methods: classroom video-recordings	1 teaching unit	No
28	Duarte (2020)	Luxembourg, Netherlands	School (Multilingual)	P	10	19 teachers, 140 students	Mixed methods: intervention (pre-post-design with an experimental and a control group, classroom video-recordings); design-based study with classroom video-recordings	5 hours; 5 hours	No

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
29	Espinet (2021)	USA	School	S+P	1	2 students as teaching interns	Ethnographic and visual methodologies: participant observation; interviews; artefacts	1 academic year	Yes
30	Fine (2022)	USA	School	S	1	1 teacher	Instrumental case study within a participatory design-based research: audio-recordings of design meetings; interviews; artefacts	1 academic year	Yes
31	French (2016)	Australia	School	S	1	17 students, 45 school staff	Ethnographic approach: focus groups, classroom observation; interviews; questionnaires; artefacts	?	Yes
32	García et al. (2011)	USA	School	S	2	n/a	Case studies: researchers' reflections on national, regional, and school-level policies	n/a school-wide focus	No
33	García et al. (2013)	USA	School	S	7	School staff, students	Classroom observations; interviews	?	No
34	van der Günther-Meij et al. (2020)	Netherlands	School (Multilingual)	S	3	7 teachers +186 students	Mixed methods design-based research study: Classroom observation and video-recordings	1 academic year	No
35	Gynne (2019)	Sweden	School	S	1	3 teachers	Ethnographic fieldwork: classroom observations and video-recordings; interviews; focus groups; artefacts	1 academic year	Yes
36	Hernandez Garcia and Schleppegrell (2021)	USA	School	S	1	2 students	Classroom observations	4 weeks	Yes

(Continues)

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
37	Iversen (2020)	Norway	School	P	6	24 pre-service teachers	Focus groups; classroom observations	1 week (observations)	Yes
38	Kakos (2022)	England	School	P + S	n/a	8 multilingual teaching assistants	Interviews	n/a	No
39	Karafylli and Maligkoudi (2023)	Greece	School	P + S	11	11 teachers	Interviews, artefacts	n/a	No
40	Karlsson et al. (2019)	Sweden	School	P	1	2 teachers, 1 mother tongue teacher, 23 students	Ethnographic data collection and research design: classroom observations and video-recordings; interviews; artefacts	3 academic years	No
41	Karlsson et al. (2020)	Sweden	School	P	1	2 teachers, 1 mother tongue teacher, 23 students	Ethnographic data collection and research design: classroom observations and video-recordings; interviews; artefacts	3 academic years	Yes
42	Kayi-Aydar and Green-Eneix (2019)	USA	School	S	1	1 teacher, 16 students	Interviews; classroom observations	1 academic semester	Yes
43	Kerekes et al. (2022)	Canada	School	P + S	11	11 teachers	Interviews	n/a	No
44	Kibler et al. (2016)	USA	Home	n/a	n/a	9 children, 10 siblings, 9 parents	Home visits observations, video- and audio- recordings	6 in-home visits x 2 hours each	No
45	Kim and Choi (2021)	USA	School	P	15	15 teachers	Case study: classroom video recordings; artefacts	15 weeks	No
46	Kwon (2022)	USA/South Korea	Museum	n/a	n/a	6 parents, 3 children	Multi-sited ethnographic study: audio recordings, museum visit observation, artefacts; documents	6 museum visits during summer	Yes / teacher training

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
47	Langman (2014)	USA	School	S	1	3 teachers	Policy documents; classroom observation; interviews	1 academic year	No
48	Le Pichon et al. (2021)	Canada	School	P	1	77 students, 3 teachers, 1 math facilitator	Mixed methods intervention: surveys, focus groups	6 months	No
49	Lemmi et al. (2019)	USA	School	S	19	19 teachers	Focus groups	n/a	Yes
50	Li and Qin (2022)	USA	School	P+S	2	3 teachers	Qualitative case studies: interviews; documents	n/a	No
51	Linares (2021)	USA	School	S	1	1 student	Classroom observations; interviews; artefacts	15 weeks	No
52	Little and Kirwan (2017)	Ireland	School	P	1	2 teachers, 6 students	Personal reflections of school director/researcher; interviews; artefacts	n/a	No
53	Lopez (2023)	USA	School	S	2	34 students	Mixed methods approach: questionnaire; assessment task; survey; individual logfiles	90-minute class session x 3 classes	Yes
54	Lundberg (2019)	Sweden	School	P	3	40 teachers	Mixed methods: Q methodology	1 year	No
55	Menken and Sánchez (2019)	USA	School	P+S	8	School staff	Comparative case study approach: interviews; classroom observations, staff meetings, and team meetings observations	1,5 academic years	Yes
56	Morales and DiNapoli (2018)	USA	School	S	1	4 students, 1 teacher	Classroom observations and video-recordings; artefacts	6 weeks	No
57	Muller et al. (2019)	Luxembourg	School (Multilingual)	P	1	15 teachers	Case study: interviews	n/a	Yes

(Continues)

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
58	Nap et al. (2023)	Netherlands	School (Multilingual)	P	3	6 teachers	Mixed methods approach: classroom video-recordings	?	Yes
59	Nuñez and Garcia-Mateus (2021)	USA	Home	P	2	4 mothers	Critical ethnography & discourse analysis: interviews; photos; questionnaire	n/a	No
60	Ollerhead (2020)	Australia	School	S	1	11 teachers	Case study with constant comparative analysis: interviews; course assessments; video diaries	9 weeks	No
61	Ollerhead et al. (2020)	Australia	School	S	1	1 focal teacher, students	Observational case study: classroom video-recordings; teacher notes; artefacts	6 weeks	Yes / teacher training
62	Panagiotopoulou and Rosen (2018)	Germany	School	S	1	14 students; 3 teachers	Ethnographic: policy documents; interviews; classroom observation	5 weeks	No
63	Patiño-Santos (2019)	Spain	School (Multilingual)	S	1	4 students	Ethnography: inside- and outside-classroom observations and video-recordings; interviews; informal conversations	1 academic semester	No
64	Perera (2022)	Australia	Faith school	n/a	1	7 teachers, volunteers, 1 school director, students	Ethnographic data and conversation analysis approach: video recordings; interviews; questionnaires	1 academic year	Yes

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
65	Pierson et al. (2021)	USA	School	S	1	1 teacher, 6 students	Design study with conjecture mapping and retrospective analysis: interviews; artefacts; photos; classroom video recordings	9 weeks	Yes
66	Pierson and Grapin (2021)	USA	School	S	1	1 focal teacher, students	Iterative design-based study: interviews; artefacts; photos; classroom video recordings	9 weeks	No
67	Prediger et al. (2019)	Germany	School	S	1	14 students	Mixed methods: classroom video recordings	5 sessions of 90 minutes each	Yes
68	Putjata and Koster (2023)	Germany	School	P+S	n/a	37 teachers	Interviews	n/a	Yes
69	Qin and Beauchemin (2022)	USA	School	S	1	1 teacher, 22 students	Classroom observations, audio- and video-recordings; interviews	1 academic semester	Yes
70	Ramirez and Jaffee (2022)	USA	School	S	1	1 teacher, 20 students	Case study design: interviews; classroom observations; artefacts	9 months	No
71	Ramirez and Salinas (2021)	USA	School	S	1	1 teacher, 20 students	Case study design: interviews; classroom observations; artefacts	7 months	No
72	Rosén et al. (2020)	Sweden	School	P+S	5	19 multilingual teaching assistants	Interviews; classroom observations; policy documents	11 school days	No
73	Rosiers et al. (2018)	Belgium	School	P+S	2	54 students	Qualitative case studies: classroom observations; interviews; audio- and video-recordings	1 academic year & 2 academic years	No

(Continues)

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
74	Ryu (2019)	USA	Community centre science programme	n/a	n/a	3 students	Video and audio recordings	5 weeks	No
75	Sánchez and Espinet (2021)	USA	School	P+S	1	2 focal teachers, students	Comparative study approach: classroom observations; PD sessions observations; interviews; artefacts	2 years	No
76	Schastak et al. (2022)	Germany	School	P	?	114 students	Quasi-experimental setting: questionnaires; tests; classroom audio recordings; pairwise correlations; non-parametric Mann–Whitney *U*-test	12 sessions	Yes
77	Scibetta and Carbonara (2020)	Italy	School	P	2	11 teachers, 146 students	Interviews; focus groups	6 months	Yes
78	Seilstad and Kim (2020)	USA	School	S	1	1 focal teacher, 1 multilingual teaching assistant, students	Ethnographic and classroom discourse analysis approaches: classroom observations; classroom audio-video recordings; interviews; artefacts	8 months	No
79	Seilstad et al. (2021)	USA	School	S	1	1 focal teacher, 1 multilingual teaching assistant, students	Ethnographic and discourse analytical approaches: classroom observations; classroom audio-video recordings; interviews; artefacts	8 months	No
80	Sierens and Ramaut (2018)	Belgium	School	P	4	31 teachers	Longitudinal, multi-method external evaluation study: classroom observation; video recordings; interviews	5 years	Yes

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
81	Søndergaard Knudsen et al. (2021)	Denmark	School	P + S	n/a	61 teachers	Questionnaire; multiple regression	n/a	Yes
82	Suárez (2020)	USA	Library science programme	n/a	n/a	4 students	Design-based research approach: video and audio recordings; artefacts	8 sessions x 60 minutes each	Yes
83	Svensson (2020)	Sweden	School	P	1	4 teachers	Longitudinal study: interviews	5 years	Yes
84	Ticheloven et al. (2021)	Netherlands	School	S	n/a	16 language education researchers, 8 teachers, 31 students	Iterative study design: Classroom observations; interviews	4 months	No
85	Torpsten (2018)	Sweden	School	P	1	3 students	Ecological approach and linguistic life-story approach: artefacts	?	Yes
86	Turner (2020)	Australia	School	P	3	7 teachers, 21 students	Design-based research: Interviews; teachers' group discussions observations; teachers reflections; artefacts	?	Yes
87	Ünsal et al. (2018a)	Sweden	School	P	1	1 teacher, 4 students	Classroom audio and video recordings	6 weeks	No
88	Ünsal et al. (2018b)	Sweden	School	S	1	1 teacher, 16 students	Classroom audio and video recordings; interviews	1 month	Yes
89	Van Viegen (2020)	Canada	School	S	1	6 classes teachers, students	Case study with inquiry approach: survey; focus groups; interviews; classroom observations	6 months	No

(Continues)

TABLE 2 (Continued)

#	Authors and year	Country	Learning setting[a]	School level	#schools	Focal participants	Declared methodological information	Study duration	Intervention[b]
90	Van Viegen Stille et al. (2016)	Canada	School	S	1	23 school staff, 21 students	Case study / Developmental evaluation approach: classroom observations, interviews, artefacts	2 academic years	Yes
91	Wedin (2022)	Sweden	School	S	1	4 students	Photographs; classroom observations; classroom audio recordings; interviews	2 academic years	No
92	Weiss et al. (2023)	Germany	School	P+S	?	53 teachers	Critical incident technique; focus groups	n/a	Yes
93	Wilson-Lopez and Acosta-Feliz (2022)	USA	School	S	2	2 teachers	Comparative case study: classroom observations; teacher reflections; interviews	1 trimester	Yes
94	Wu et al. (2018)	USA	School	S	2	19 students, 1 teacher	Mixed methods: focus groups; classroom audio recordings; classroom observations; interviews; achievement data; survey	6 weeks	No

Abbreviations: P, primary school; S, secondary schools.

[a]All schools are monolingual unless specified otherwise.

[b]An intervention is understood here from a broad perspective, referring to a broad range of actions that aim to lead to changes in already established language practices in particular learning settings. Examples: design- or action-research based research; teacher training; quasi experimental studies. These are in contrast with studies that focus on language practices, beliefs, attitudes, etc. without the aim of modifying them.

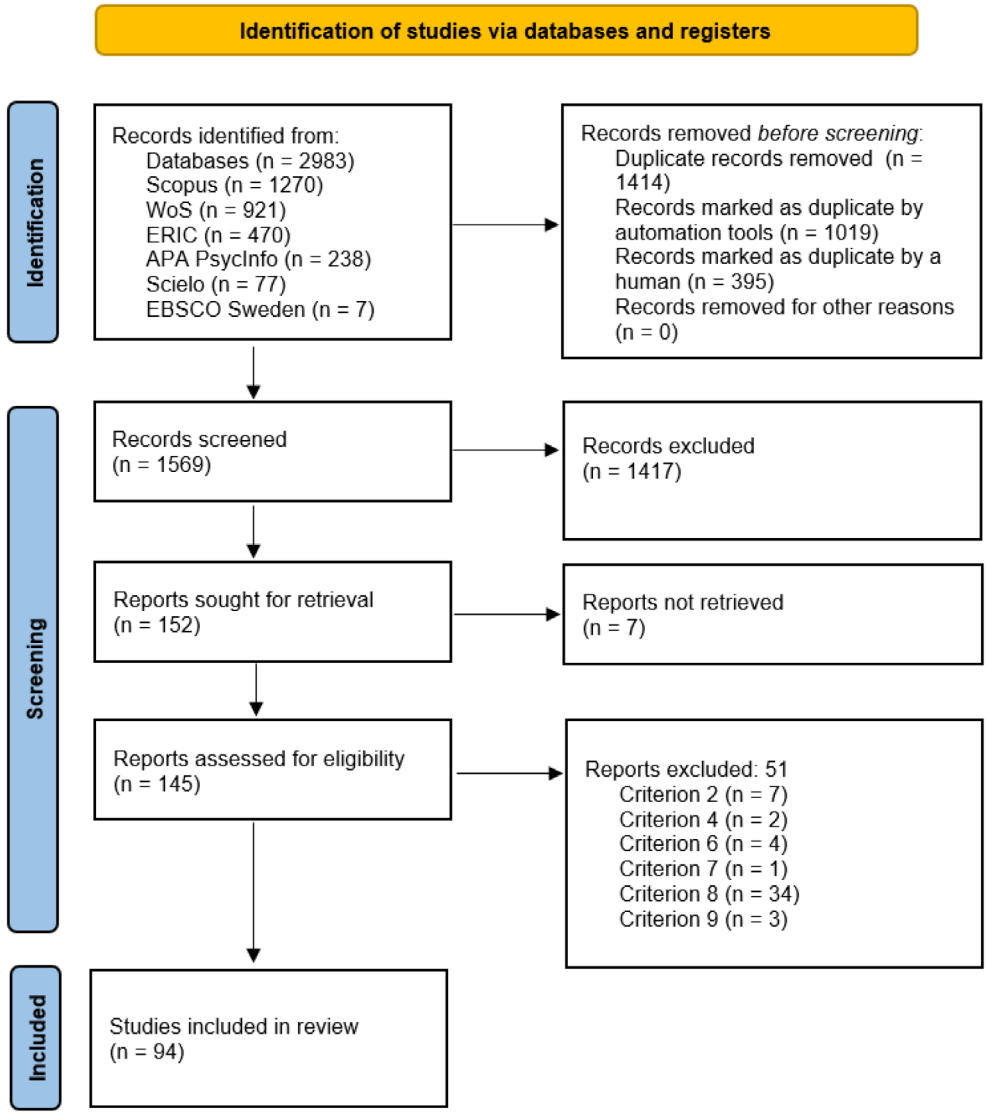

FIGURE 1 PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only.

located either in North America (47) or Europe (41) and a minority in Australia (6). All studies were written in English, with two exceptions (Swedish). The vast majority of publications declared having employed ethnographic-oriented research methods (80). Fewer studies employed mixed methods (12), while strictly quantitative methods, such as questionnaires, were the ones used least (2). The majority of the studies employing ethnographic-oriented research methods as well as mixed methods often triangulate a wide variety of data, such as interviews, classroom observations, classroom audio- and video-recordings, and artefacts. As such, they also capture a wide range of perspectives, often combining children's and teachers' perspectives. Many of these studies involve intensive and prolonged fieldwork: a period or one or more years (25 studies), six or more months (14 studies), or three or more months (7 studies). See Table 2 for a full overview of the publications included.

The rest of the results section follows the four research questions regarding the possible processes, challenges, favourable conditions, and potential for change involved in translanguaging. The second and third subsections (challenges and favourable conditions) are divided in two parts, corresponding to school and out-of-school settings. The first and the last two subsections (processes and potential for change) focus on translanguaging across learning settings, which means they no longer follow the same structure. We refer to the publications in the set with numbers rather than names as a compromise between ensuring readability and providing an informed overview of the extent of literature: 15 or fewer references are included to indicate completeness, while 3 examples of references indicate that more than 15 publications refer to the same point. Authors' names are included for direct quotes or specific cases.

RQ 1: Processes involved in translanguaging

Translanguaging, understood here as both a type of linguistic practice and a pedagogical approach, is depicted in the reviewed literature as involving a variety of complex, dynamic and interlinked processes that seem to defy categorisation. We distinguished seven key processes. Here we offer a description of these processes and a proposal for unpacking the links between them.

We divided the seven processes into constitutive processes and leveraging processes. Constitutive processes refer to the processes through which translanguaging practices can be enacted: (i) combining linguistic features attributed to different named languages; (ii) employing semiotic features multimodally; (iii) translating; (iv) comparing. Leveraging processes are processes through which such practices can be promoted: (v) collaborating; (vi) brokering; (vii) designing a multilingual linguistic landscape.

Translanguaging is seen here as a dynamic practice whose core is the first constitutive process: combining linguistic features attributed to different named languages. This first process can emerge either on its own or in successive or simultaneous combinations with one or more of the three other constitutive processes (e.g., 17, 31, 55). Leveraging processes can be additionally combined to further enhance the enactment of the translanguaging practices (e.g., 27, 43, 16). However, if any of the six processes emerges without the first constitutive process, we do not consider the resulting practices as translanguaging.

Translanguaging practices thus involve either solely the first process or combinations of the first process with one or various other processes. Such combinations depend on myriad conditions, such as language competence, classroom composition or access to specific resources. Consequently, countless combinations of the seven processes can emerge, each combination yielding new linguistic practices that are different from the practices involved in each individual process. As such, we acknowledge that the seven processes may overlap and emphasise that our categorisation represents one way of unpacking them.

Constitutive processes

Four constitutive processes involved in translanguaging were identified: combining linguistic features attributed to named languages, employing semiotic features multimodally, translating, and comparing. These processes refer to how translanguaging practices are enacted.

Combining linguistic features attributed to different named languages

The core constitutive process involved in translanguaging is combining linguistic features attributed to different named languages from a person's entire linguistic repertoire. This

combination can emerge at multiple levels, such as: employing home languages in a setting characterised by a mainstream language; drawing on different named languages at the level of reception and production; across different linguistic modalities; within the same modality among different interlocutors; or within the same modality through what is also known as inter-sentential, intra-sentential or intra-word-level code-switching.

Despite this complexity, several key elements were identified. In all settings, the most common practice is producing oral practices either combining linguistic features from the home and mainstream languages (e.g., 14, 67, 81) or only using the home language in contexts characterised by the prevalence of a different mainstream language (e.g., 13, 61, 78). An equally common practice is writing employing both the home and mainstream language, or using the home language only (e.g., 6, 50, 66). The next most common practice is reading either multilingual materials or materials written in the home language (e.g., 8, 19, 46). The combination of linguistic features attributed to different named languages usually happens simultaneously at various levels and across different linguistic modalities—the exact configuration depending on specific circumstances.

Employing semiotic features multimodally

While translanguaging can involve only combining linguistic features attributed to different named languages in one linguistic modality (e.g., oral), or across different linguistic modalities (e.g. oral and written), these practices can also emerge in complementarity with various non-linguistic semiotic features (9, 12, 22, 25, 30, 43, 45, 48, 60, 65). Such elements can be gestures, gaze, or other body movements (e.g., 23, 37, 91). Other combinations of linguistic and non-linguistic semiotic features can be linked to: drawings, images, and general visual support (e.g., 26, 40, 87); dictionaries and online translations tools (e.g., 91); bilingual glossaries, children-created dictionaries, anchor charts, organisers, dual-language flashcards (e.g., 38, 89, 90); videos, audio recordings, webpages, or language kiosks in museums (e.g., 22, 45, 78); or online content-specific platforms (48). Translanguaging practices are thus multimodal practices; they can involve simultaneously combining a wide range of linguistic and non-linguistic semiotic features in a vast number of ways that build on each other.

Translating

Translating is one of the most reported processes across the surveyed literature. At school, children are the main agents who translate from the mainstream language(s) to home languages; such translations concern mainly key notions employed in content classrooms, as well as instructions and even whole texts (e.g., 37, 55, 88). Children can also translate their work conducted in the home language for the rest of the class (e.g., 60, 78, 85). In fewer cases, teachers engage in producing and offering translations of key notions and material in the children's home languages (e.g., 10, 42, 45). However, teachers and children often work together to identify the need for translations, to provide the necessary tools and to employ them in the undergoing tasks. Such collaboration also emerges in out-of-school learning settings, such as at home or museums between children, caregivers and siblings (5, 44, 46) or in after-school programmes among children or facilitators (74).

Comparing

Making cross-language comparisons is a widely employed process (18, 33, 35, 58, 61, 66, 78). Such comparisons allow highlighting similarities and differences at the level of vocabulary, grammar rules and syntactic structures (25) and are useful for drawing connections across linguistic repertoires and modalities (26). Attention is given primarily to vocabulary and, in particular, to cognate instruction and discussion (18, 25, 33, 36, 58, 78, 94). Apart from oral comparisons, other options are multilingual word walls, anchor charts and (false) cognate walls (20, 45, 55, 61, 90). Additionally, epistemic and cultural comparisons can

also be drawn upon. Christensen (2022) and Nap et al. (2023) refer to comparisons of numeral systems across languages in terms of writing, pronunciation, and formation. Prediger et al. (2019) and Christensen (2022) highlight how similarities and differences in mathematical discourses and conceptualisations can be traced across languages and cultures.

Leveraging processes

Three leveraging processes were identified: collaborating, brokering, and designing a multilingual linguistic landscape. These processes refer to how translanguaging practices, enacted through the constitutive processes outlined above, may be promoted and facilitated.

Collaborating

Collaborating with people who share a similar linguistic repertoire is one of the most common processes through which translanguaging practices can be leveraged. Especially at school, this process can materialise through peer-collaboration, often in the form of planned teacher-initiated language pairs or groups (e.g., 10, 60, 74). Additionally, peer collaboration can be child-initiated, as a result of children's needs. Such interactions often emerge when translanguaging is not actively encouraged, but there is certain flexibility regarding language use; in other cases, such interactions directly defy the language norms in the classroom and are often silenced (2, 5, 19, 27, 31, 41, 51, 56, 63, 89, 91, 94). In out-of-school settings, particularly after-school programmes, peer collaboration in language groups is also a common form of leveraging translanguaging practices (18, 74). Collaboration among siblings at home (44) and collaboration between children and caregivers during museum visits (11, 46) have also been shown to foster translanguaging practices.

Brokering

Brokering refers to people—brokers—acting as a bridge between worlds by introducing elements from one practice into the other (Wenger, 1998). At school, professional staff such as bi-/multilingual teaching/classroom assistants can function as brokers (1, 16, 21, 28, 29, 36, 38, 40, 41, 72, 78, 79, 80, 91). They establish continuity between the home and the school (38) by enabling children to navigate schooling by translating between languages, curriculum, school systems (38, 41) and cultures (72). They legitimise children's prior knowledge, experiences and linguistic practices with their home languages (21, 29, 38).

When multilingual classroom assistants are not available, children act as brokers (e.g., 16, 40, 73). Children with a higher competence in the mainstream language are usually enlisted as brokers to help their peers and teachers understand each other by interpreting and translating (e.g., 8, 23, 80). While this process is often employed as a first step towards basic access to instructions and content, brokers can also engage in higher-order meaning-making with their peers (23, 41, 91). At home, older siblings can act as brokers for younger siblings by using and building knowledge in two named languages when helping with homework (44).

Designing a multilingual linguistic landscape

This process generally involves visibly displaying children's home languages through posters, signs, flags or authentic materials, such as dual language books (8, 24, 39, 43, 45, 52, 55, 80). Multilingual linguistic landscapes are often created by educators, but they can also be (co-)created with/by children. Often, these signs have a symbolic function, affirming children's multilingual identities and enhancing their sense of belonging. They can also have a pedagogical purpose, particularly when children translate and display key lesson vocabulary (4, 18) or their multilingual work (24, 93).

RQ 2: Challenges to translanguaging

This section presents the potential challenges that may hinder the promotion and production of translanguaging practices in different learning settings. While there are multiple interlinked challenges to translanguaging, a common denominator is the prevalence of a monolingual approach reproduced at the level of policy, institutions, teachers, children, and caregivers.

Challenges to translanguaging at school

Policy level

Language policies at national or regional level can reproduce a deficit model of multilingualism and a monoglossic ideology by implementing a monolingual curriculum and testing regime (1, 15, 19, 24, 25, 29, 31, 47, 53, 62, 66). This usually involves a focus on what children must learn in content classrooms and an invisibilisation of their previously acquired knowledge and skills (47). Furthermore, policies are sometimes informed by misconceptions surrounding language and content matter, such as the idea that certain disciplines (e.g., science) are relatively language-free, building the expectation that children with lower skills in the language of instruction should navigate content with ease (47). Conversely, the lack of explicit policies (7, 54) can form a challenge to translanguaging.

Institutional level

At the institutional level, the most salient challenges to translanguaging are traditional monolingual language ideologies, policies, and practices (4, 6, 20, 25, 51, 61, 62, 66, 76, 85, 91, 93). When the mainstream language is recognised as the only legitimate one at school, children with a migration background are perceived by some school leaders as being 'in need of language' and possessing 'an illegitimate form of language' (Ascenzi-Moreno et al., 2016, p. 207). As such, schools frame home languages as barriers to learning both academic content and the target language (6, 20, 51), which is why it is thought that children with a migration background need to be separated from their home languages to achieve academic success (4). This represents one of the most significant challenges to translanguaging in content classrooms.

When a translanguaging approach is considered at an institutional level, the most common challenge is lacking financial resources for materials, staff, or training (15, 32, 43, 71). Other challenges can be school leaders' lack of knowledge of how to implement this approach; seeking generic and external solutions; adopting a top-down approach (4); and placing the responsibility on few people, making it potentially unsustainable (32). Another potential challenge is a mismatch between a declared institutional support for translanguaging and the actual monolingual teaching and assessment practices expected of teachers and children (1, 15, 20).

Teacher level

Most challenges to translanguaging are reported among teachers. The strongest challenges to translanguaging in content classrooms seem to be teachers' monolingual ideologies materialised through different attitudes and practices (7, 35, 54, 80). First, teachers often place a strong focus on children's need to learn the mainstream language(s) through an immersion approach that promotes strict language separation (2, 6, 7, 15, 31, 62, 68, 80). Consequently, home languages are sometimes framed as barriers to acquiring the mainstream language in the content classroom (1, 2, 61, 83, 84); this can entail a normative perspective on language mixing understood as an illegitimate form of expression, or 'broken' language (31), which might lead to children getting confused (84). Second, home languages

are sometimes portrayed as leading to the potential exclusion of speakers who do not share the same linguistic repertoire (31, 61, 68) and to disruption or misuse of a 'secret' language to annoy others or to swear (31, 68). Often, teachers in content classrooms report feelings of losing control, discomfort, and distrust associated with home languages (2, 18, 25, 32, 35, 80, 84). Third, there is also some reported scepticism among teachers regarding the benefits of translanguaging for learning (7, 84).

Even when translanguaging is considered a desired practice in the content classroom by teachers, there are still challenges to overcome. Lack of training is one of the most significant challenges that hinders implementing translanguaging and accepting it as legitimate (1, 2, 3, 7, 15, 30, 43, 47, 48, 60, 61, 83, 86, 91). This can lead to discrepancies between positive attitudes to translanguaging and actual monolingual practices (2, 7, 15, 30, 31) and a superficial implementation of translanguaging through: passive acceptance of home languages rather than active encouragement (26, 31, 32, 74, 80, 91); the use of home languages only for symbolic purposes, very low stakes, or only as a scaffold for the mainstream language in content classrooms (1, 31, 58, 80); or a lack of connection between translanguaging and content through relevant task design and meaningful activities (35, 47, 80, 86, 87, 93).

Finally, teachers in content classrooms also encounter practical challenges: time constraints often related to the pressure to comply with the curriculum (1, 9, 13, 15, 20, 31, 45, 48, 80); lack of financial resources (76, 80); lack of language competences to fully support and assess children when making sense of content using home languages (1, 30, 40, 81, 53); and a lack of collaboration with other teachers (45, 71, 83, 90).

Child level

The first and most salient challenge to translanguaging at child level is connected to an internalisation of monolingual institutional norms. Particularly at the beginning of translanguaging interventions, children may be reluctant to use their home languages in institutional settings, feeling shame or fear (1, 6, 8, 18, 31, 63, 75, 77, 83). Children may also fear that using their home languages may exclude others (29), or they may fail to see how translanguaging can help them learn (86). In one study children declared a fear of confusion, perceiving home languages as barriers for learning the mainstream language, or as an additional effort leading to tiredness (84). Second, numerous studies highlight that high linguistic diversity in the content classroom can represent a significant challenge for translanguaging (1, 10, 18, 20, 24, 81, 51, 66, 78, 87, 93). Third, additional challenges can be: (il)literacy in the home language (1, 6, 20, 78, 79); a general low competence in the home language (84) paired with a lack of subject-specific vocabulary or academic register (1, 40, 78); or a range of diverse competences in the home languages in the classroom (20). However, there may be stark differences between teachers' and children's perceptions of language competences and actual competences. Exemplary is the case highlighted by Cataldo-Schwarzl (2022), where a teacher in a German mainstream classroom expressed scepticism regarding a child's language competences in Turkish, but when translanguaging was implemented, the child was able to carry out all tasks in Turkish.

Caregiver level

Three studies show that caregivers' attitudes may also represent a challenge to translanguaging at school. At the beginning of translanguaging interventions, families expressed concern that such an approach might prevent their children's acquisition of the mainstream language or lead to social exclusion (52, 84). Another study highlights a teacher's concern that caregivers might not be in favour of translanguaging (83). The first and most detailed study mentions that caregivers' attitudes quickly changed in favour of translanguaging due to children's enthusiasm and educational progress fostered by this

approach (52), the second study does not provide any further information (84), and the third study does not mention any actual opposition on the caregivers' side (83).

Challenges to translanguaging in out-of-school settings

The studies on out-of-school settings provide scarce information regarding potential challenges to translanguaging. In a library-based science learning programme, two challenges were reported: (high) linguistic diversity and the instructor not sharing the linguistic repertoire of the participants (82). Another study indicates that family members may sometimes reproduce separatist language ideologies or lack subject-specific vocabulary in the home language, making it difficult to engage in translanguaging for content learning (44).

RQ 3: Favourable conditions for translanguaging

This section introduces the key favourable conditions for translanguaging in and out-of-school. However, this section should not be read as a 'recipe' for how to implement this approach in the future. A shift from a monolingual to a translanguaging approach is usually a long process that requires efforts at different levels and the consequences of adopting translanguaging will always remain dependent on specific contextual factors.

Favourable conditions for translanguaging at school

Policy level

Some studies show that local policies can represent favourable conditions for valuing home languages in education (80); regional policies can support curricular changes in teacher education programmes (43); and national policies can enhance the availability of digital multilingual resources (12). However, one study highlights that even if policies at national level may encourage multilingual practices at school, they are not always applied in practice if teachers' ideologies are not aligned with such policies (2).

Institutional level

At the institutional level, there are several, interlinked favourable conditions for translanguaging. A flexibilisation of school language policies (4, 20, 33, 55, 80, 83) coupled with changes in the school leaders' attitudes towards multilingualism and translanguaging (4, 21, 25, 55, 89) through training (4, 20, 52, 71, 81) represent some of the most significant favourable conditions. It may also be useful to: collect information on multilingual children's linguistic needs (52); ensure that teachers get enough time both inside and outside the classroom for implementing this approach (1, 4, 20); and offer access to resources, such as multilingual staff or technology (1, 21, 32).

Furthermore, collaborative leadership (4, 81) and collaborative teaching (4, 32) may be propitious for promoting translanguaging. Rather than imposing a top-down policy, providing teachers autonomy and support to enact leadership in language policy changes is key (4, 33, 52). As such, teachers should be positioned by the school as the main experts and 'creative forces in forging new practices' (Ascenzi-Moreno et al., 2016, p. 209) starting from their own contexts (10, 20, 28, 52, 80).

A final favourable condition refers to schools involving caregivers and the wider community in children's formal learning process. First, schools can offer caregivers institutional access through: multilingual orientation materials; discussions regarding their linguistic

backgrounds and needs; or even support learning the mainstream language (4, 6, 21, 32, 43). Second, the most significant way of involving caregivers is by positioning them as fundamental agents supporting children's content learning (12, 16, 20, 25, 75, 83, 86, 93). This can mean designing tasks tapping into the experiential, linguistic, and content knowledge of the caregivers and wider community. Involving caregivers can represent a favourable condition for translanguaging at school; simultaneously, translanguaging can also be a favourable condition for fostering a strong connection between the school and the home.

Teacher level

Most favourable conditions are reported among teachers in content classrooms. Key elements are teachers' existing or emerging positive attitudes to multilingualism, home language, and translanguaging (5, 7, 10, 16, 26, 60, 81, 83); active efforts to shift from a monolingual to a language-inclusive approach (24, 49, 63, 77, 86, 89); and a critical perspective towards educational inequalities (5). These three elements can be activated through training (3, 4, 15, 16, 25, 30, 54, 55), but they can also develop in time, while a translanguaging approach is implemented.

Having access to information about children's linguistic repertoires, competences, and literacies (8, 16, 18, 20, 65, 66, 86, 89, 90) is a key favourable condition. Teachers in content classrooms knowing what children can do with their languages is significant considering the translanguaging tenet to base instruction on 'students' actual language practices, or from the bottom up' (Daniel & Pacheco, 2016, p. 661).

The explicit introduction of classroom norms that legitimise translanguaging practices (17, 36, 55, 80) is also a favourable condition. Studies show that teachers in content classrooms need to actively encourage children to engage in translanguaging practices (75, 78, 85) by: helping children identify their language and literacy practices as valid (17); scaffolding translanguaging (17); explicitly and systematically inviting and reminding children of the possibility to translanguage (36, 47, 76); as well as modelling translanguaging (23, 47, 89, 93).

Teachers having a common linguistic repertoire with children can be a favourable condition for translanguaging at school (5, 35, 50, 70, 71, 78, 91, 93). However, several studies show that it is not necessary for teachers to speak children's home languages to implement translanguaging in content classrooms (16, 36, 40, 55). In such cases, teachers need to be willing to ease control, learn to be comfortable with their lack of understanding, and trust children (2, 9, 30, 61, 83). Additionally, teachers can also position themselves as language learners or decoders of children's home languages, for symbolic, modelling, and/or pedagogic purposes (24, 30, 34, 65, 89, 93).

A final favourable condition refers to designing translanguaging tasks starting from a disciplinary content perspective (66) and helping children 'identify disciplinary reasons for translanguaging' (Pierson et al., 2021, p. 789). This condition emerges in light of translanguaging often being used mainly either for symbolic purposes or as a scaffold for (non-content-related) mainstream language learning even in content classrooms (36, 79, 89), and not as a means to build conceptual knowledge.

Child level

The first and most important favorable condition is that children are positioned as experts in their linguistic repertoire, as well as active agents in their learning and decisions over language practices (9, 12, 20, 31, 32, 34, 42, 45, 55, 61, 83). Second, children's existing or emerging positive attitudes towards multilingualism are also important favourable conditions (8, 31, 77, 85). Third, while some studies contend that it is important for children to be literate in their home languages (1, 79), Duarte (2019) highlights that children do not necessarily need an overall high proficiency in their home languages 'to engage in cognitively

demanding talk, as even receptive skills or youth jargon were shown to be useful resources for interthinking' (p. 163).

Favourable conditions for translanguaging in out-of-school settings

Some studies contend that out-of-school learning settings offer more flexibility regarding language use, which is why translanguaging sometimes emerges with more ease there than at school (19, 64). The information identified in the out-of-school studies partially mirrors the favourable conditions pertinent at school: literacy in the home language (19); translanguaging tasks designed from a disciplinary content perspective (74); the instructor setting linguistic expectations (82); availability of multimodal resources (46); caregivers' efforts (46); children's agency (46); and the presence of other people sharing the linguistic repertoire of the child (44, 82).

RQ 4: Potential for change held by translanguaging

The reviewed literature illustrates that translanguaging holds significant potential for change associated with advancing equitable educational opportunities for multilingual children with a migration background. To provide a nuanced examination of this potential for change we adopt a boundary-work lens: while stressing the boundary crossing potential in translanguaging, and the continuity such practices can establish for multilingual children with a migration background, this lens also highlights that such practices might simultaneously trigger and require new boundaries and, therefore, certain discontinuity for some agents.

Continuity across home and school

Translanguaging can involve boundary crossing, leading to continuity in language practices and learning across home and school for multilingual children with a migration background. Approximatively two-thirds of the reviewed publications suggest that drawing on the linguistic resources and experiences that children bring from home and other out-of-school settings can support in-school learning in general and disciplinary content in particular (e.g., 21, 40, 80).

A large number of studies give insights into how translanguaging can grant children access to curriculum and instruction, affording (basic) comprehension of subject-specific content, particularly for children with a low proficiency in the mainstream language (5, 26, 31, 33, 48, 50, 52, 55, 69, 72, 73, 83, 90, 94). Also, translanguaging can enable children to express themselves, demonstrating their understanding and content knowledge in formative and summative tasks or assessments (1, 6, 23, 25, 30, 36, 45, 53, 55, 61, 65, 71, 89).

Furthermore, translanguaging is strongly linked to disciplinary meaning making (3, 19, 23, 36, 55, 66, 70, 71, 87). The literature shows that drawing on home languages in the classroom has the potential to facilitate and enrich children's conceptual understanding of subject-specific content (27, 67, 40), and not only scaffold mainstream language learning and teaching as a transitional strategy (89). Translanguaging may support the development of disciplinary concepts and skills through four key ways: (i) processing subject-specific content and deep thinking (31, 45, 56, 60, 65, 71, 79, 87, 94); (ii) comparing different languages and conceptualisations, helping build links between languages and content matter (1, 24, 41, 66, 67, 72, 73); (iii) contributing to bringing forth previous knowledge, experiences and

perspectives from different learning settings; and (iv) supporting the development of multilingual disciplinary literacies (3, 26, 31, 36, 60, 61, 85, 89). Wu et al. (2018) exemplify how translanguaging can support disciplinary meaning-making in a science class: starting from a written task in English, three children discuss the meaning of the words 'photoreceptor' and 'receptor' in English and Spanish, some claiming they are different notions, while others arguing they are the same. Translanguaging allows them to 'discuss the validity of a scientific idea', a key feature of making sense of scientific knowledge (Wu et al., 2018, p. 120).

Additionally, translanguaging has been linked to increasing children's participation and engagement in learning (10, 12, 13, 20, 38, 80); their confidence as (multilingual) content learners (3, 16, 16, 33, 36, 41, 55, 60, 90); and their motivation for learning (52, 75, 81). It can also support peer collaboration and community building (e.g., 22, 35, 77). For example, Morales and DiNapoli (2018) show how translanguaging helps a group of Latinx 12th-graders develop mathematical understandings of a complex exponential function by collectively persevering through a series of failed attempts.

Translanguaging can also have a powerful socio-emotional role, bridging children's worlds (8, 73, 84, 89). It can show difference is accepted (47) and support a sense of inclusion and belonging (21, 55, 71). Furthermore, translanguaging can support the maintenance and development of both home languages and mainstream languages (1, 6, 19, 36, 41, 42, 60, 72, 84), playing a role in the empowerment of bilingual speakers (e.g., 6, 10, 21) and their identity construction, marking, and negotiation (42, 47, 51, 73, 77, 81). Focusing on a science teacher who promotes translanguaging to create a fun and caring relationship with and among children, Qin and Beauchemin (2022) show that 'the emotional, relationally engaging classroom talk' enabled by translanguaging can create 'ways of being together' (p. 9) that sustain children's learning of disciplinary content.

Continuity across home and other out-of-school settings

Translanguaging can also establish continuity across home and other out-of-school settings for multilingual children. Translanguaging in after-school programmes, science programmes, museums, or faith schools can support (collaborative) disciplinary meaning making (14, 19, 46, 64, 74, 82), mirroring the results from in-school settings. Focused on after-school science learning programmes, Ryu (2019) shows that translanguaging can represent a key factor in thinking, processing, and forming ideas about scientific phenomena, while Suárez (2020) shows how translanguaging aids children when problematising and sharing ideas about electrical phenomena. Ryu (2019) also suggests that translanguaging allows participants to negotiate multifaceted positions, fostering bonds through which playfulness or frustration can be enacted. This can promote children's participation and engagement, as well as validate their 'rightful presence' as central, rather than marginal agents in science activities. Similarly, translanguaging can facilitate building bonds and equalising positions between children and caregivers when making sense of disciplinary content (14, 46).

Interplay between continuity and discontinuity

From a broad standpoint, translanguaging challenges oppressive, monolingual language ideologies, disrupting to a certain extent the prevalent linguistic hierarchies (e.g., 23, 50, 85). As such, the continuity established for multilingual children as discussed above simultaneously requires and triggers a change materialised through redrawing the boundaries around monolingual norms and practices. This change may be experienced as a form of discontinuity, particularly by institutional agents. However, this interplay between

continuity and discontinuity is highly dynamic: several studies show that after implementing a translanguaging pedagogy, the language ideologies and practices of educators, children, and caregivers change towards a more comprehensive view of the child and less resistance to the use of home languages in the classroom (8, 52, 55, 77, 83, 85, 90). Consequently, the experience of discontinuity is not static, but can change over time, in close connection to the change in practices. Particularly when a translanguaging pedagogy is accompanied by its political dimension of promoting social justice, it can help the struggle against the linguistic, social, and educational inequalities multilingual children with a migration background encounter (1, 43, 48, 57).

At a more granular level, translanguaging may also involve the creation of potentially new boundaries, generating certain forms of discontinuity. It is particularly challenging to differentiate between the reproduction of the challenges to translanguaging resulting from the dominance of the monolingual norm, as shown above, and the emergence of entirely new boundaries as a consequence of translanguaging. Acknowledging this complexity, here we suggest three potential discontinuities generated by translanguaging.

First, translanguaging can involve some discontinuity in interaction among people who do not share similar linguistic repertoires. For example, Ünsal et al. (2018a) focus on how four children with a Turkish background made sense of electric phenomena in a Swedish class. The children encounter significant challenges expressing themselves using longer utterances in Swedish but face almost no limitations when working in language groups and translanguaging in Turkish and Swedish. However, during the group activity the children seldom interact with other peers and, when using Turkish, the teacher does not follow their interactions. Nevertheless, the children draw on different linguistic features attributed to named languages depending on their interlocutors, being able to fluidly and rapidly move from a conversation in Swedish with the teacher, to a Turkish-Swedish conversation in the language group, and then to a class discussion in Swedish. We consider that the study showcases a complex interplay between continuity and discontinuity: the children face discontinuity trying to express themselves in Swedish and they experience continuity when translanguaging in Turkish and Swedish. The continuity enabled by translanguaging for the children also involves a simultaneous discontinuity between these children, the rest of the class, and the teacher. However, this discontinuity is only partial and temporary, the interplay between continuity and discontinuity being swift and having no negative consequences. Yet, experiences of exclusion or conflict can happen (2, 10, 51, 65, 83). Cataldo-Schwarzl (2022) shows that particularly children with unique home languages in the classroom can feel excluded and frustrated when they cannot translanguage using their home language with peers. At the same time, teachers in content classrooms across various studies feel that their inability to understand what the children say or write in their home languages may prevent them from having control over the teaching and learning process (2, 18, 25, 32, 35, 80, 84), from providing children the necessary support when engaging with content (1, 30, 40, 81, 53), and from designing and interpreting translanguaging in assessments (30).

Second, a translanguaging pedagogy requires time. Translanguaging may, at times, mean covering content at a slower speed, leading to potential tensions with the curriculum (1, 13, 53, 84). It may also require more time for planning and preparation for educators (1, 61, 83, 90). When institutional expectations and working conditions are not adjusted to the reality of multilingual children, translanguaging can simultaneously lead to certain forms of continuity for children, enabling them to make sense of content, and to certain forms of discontinuity for teachers, who may not be able to comply with top-down expectations and practices.

Third, linked to the previous point, one study suggests that translanguaging may sometimes involve missed opportunities to practise subject-specific content in the mainstream language to gain mastery (49). As such, while continuity for multilingual children may be established through translanguaging enabling access and disciplinary sense making, it may

also simultaneously involve a potential discontinuity materialised through the shorter amount of time spent mastering that content in the mainstream language. We highlight that this finding is not supported by similar claims in other studies. Furthermore, one study indicates that translanguaging may not always support children in passing standardised, monolingual tests (47). While this is not a discontinuity caused by translanguaging per se, but rather by policies functioning as boundaries for children with a migration background, attention must be paid to the alignment between classroom practices and standardised assessment realities.

DISCUSSION AND CONCLUSION

The aim of the present review was to take stock of the current knowledge regarding the possible processes, challenges, favourable conditions, and potential for change involved in translanguaging within and across learning settings in the case of children with a migration background engaged in disciplinary content learning.

The review distinguished seven interlinked processes which we further divided into: constitutive processes (combining linguistic features attributed to different named languages; employing semiotic features multimodally; translating; comparing); and leveraging processes (collaborating; brokering; designing a multilingual linguistic landscape). Translanguaging practices may involve either the first process, or combinations of the first process with one or various other processes, the resulting constellations depending on specific contextual conditions. Distinguishing these processes across the publications included and our proposal of unpacking the links between them can contribute to better understanding which linguistic practices can be considered translanguaging and which cannot. It can also facilitate further operationalising this approach in different learning settings. This responds to calls for more clearly defining the term for pedagogical purposes (e.g., Treffers-Daller, 2023, 2024).

Furthermore, this review highlighted that the challenges and favourable conditions for translanguaging in schools can be found at the level of policies, institutions, educators, children, and caregivers. The most significant challenge is the prevalence of a monolingual norm across all these levels, influencing people's ideologies, attitudes, and practices. Consequently, most favourable conditions refer to ways in which a monolingual norm can be overcome. Although most research was carried out in schools, out-of-school settings tend to mirror these results. Apart from confirming the findings of previous research which highlights the existence of a monolingual norm in mainstream education and its consequences (e.g., Gogolin, 2021; Martin-Jones, 2007; Rojo, 2010), this study also provides deeper insights into the levers involved in the implementation of translanguaging.

Finally, we examined the potential for change involved in translanguaging through a boundary-work conceptual lens. While transformative claims have been previously questioned (e.g., Jaspers, 2018; Jaspers & Madsen, 2019), this review found that translanguaging does hold significant potential for change for multilingual children with a migration background by generating continuity in language practices and content learning across home and institutional settings. Perhaps the most compelling finding in this regard is that translanguaging may not only support basic access, but also facilitate and enrich conceptual understanding of content. However, simultaneously, translanguaging also involves certain forms of discontinuity, especially for institutional learning settings, and, to a smaller degree, for children. Consequently, the emergence and promotion of translanguaging involves an ongoing, dynamic interplay between discontinuity and continuity, whose characteristics are socio-historically situated. These findings are in line with other researchers' claims that the opportunities provided by translanguaging experienced as transformative by some agents may lead to and even require the emergence of new social walls for other agents (e.g.,

Jaspers & Madsen, 2019). The proposed interplay can serve as a guiding tool for researchers in making sense of translanguaging practices and for practitioners when deciding how to shape interactions in different learning settings.

The findings of this review are strictly based on studies focused on translanguaging involving the home languages of multilingual children with a migration background engaged in content learning within and across different learning settings. Consequently, they respond to specific language dynamics and socio-historical conditions which involve processes of linguistic minoritisation due to migration (Bonacina-Pugh et al., 2021). A consequence of this focus was that all reviewed studies were conducted in the Global North, despite not employing a country-specific criterion. Consequently, although the review is intended for a global readership, not all its findings can be easily extrapolated to different educational settings (e.g., complementary language education, foreign language education) or to socio-political educational contexts where the dynamics between named languages are significantly different (e.g., South Africa, Hong Kong). Nevertheless, the proposal of unpacking the processes involved in translanguaging can represent a springboard for analysing such practices in other settings as well. Additionally, the insight that translanguaging involves an interplay between continuity and discontinuity for different agents is expected to be relevant for other contexts, although it would entail different particularities embedded in specific socio-historical conditions.

Limitations

One limitation refers to the use of contested categories to discuss translanguaging, such as 'languages'. While we agree with Turner and Lin (2020) who suggest that the significance of named languages in social practices and learning settings needs to be considered, translanguaging still resorts to the categories of a structuralist understanding of language as a fixed code in spite of its attempts to go beyond it (Orman, 2013). Although beyond the remit of this article, we acknowledge that this study also employs the same categories and, therefore, reproduces an examination of translanguaging based on languages as fixed codes.

Another potential limitation refers to the search strategy employed, having decided to include only articles and book chapters. While this decision was taken with the aim of ensuring a base level of quality in light of the peer review process, the results of the present study may have been enriched had we decided to also employ other publications, particularly MA and PhD theses.

An additional limitation could be the chosen databases. Although in this study we employed six key databases, an even more comprehensive option would have been to access more country- or language-specific databases. This may have led to more search results in different languages. It is important to note, however, that attempts were made with several databases, such as Dialnet (focused Hispanic scientific literature); however, at the time of carrying out the search, access to this database was not an option for our team.

Future research directions

A fruitful area for further work is examining translanguaging in out-of-school settings and across different learning settings (Axelrod & Cole, 2018; Back, 2020; McCarthey et al., 2020). Although the existing literature sheds light on some aspects involved in such learning settings, this area is still underdeveloped. Both institutional learning settings—such as after-school programmes, museums, libraries, or complementary schools—and

non-institutional settings—such as the home or the neighbourhood—need to be recognised as key elements in the (content) learning trajectory of multilingual children with a migration background. Adopting a 'life-wide perspective' (Akkerman & Bakker, 2019) may explain how language practices are negotiated across multiple learning settings. Additionally, across all learning settings there is a need to pay closer attention to the voices of children and caregivers.

Furthermore, following Pierson and Grapin (2021) we suggest a closer focus on the relationship between disciplinary meaning making and translanguaging. More research is needed to determine what tools, strategies, routines, or design principles would ensure that translanguaging practices involving home languages are best aligned with learning and teaching disciplinary content. As such, while the processes identified here do not seem to be linked to specific disciplines, additional research is needed to better understand whether certain processes or sequence of processes are more appropriate for certain age groups, disciplines, content learning goals, languages, or linguistic competences among learners. This is particularly important for advancing towards a pedagogical approach whose purpose is not just offering basic access to content but focuses instead on how such language practices facilitate deep thinking and higher-order meaning making.

Methodologically, the vast majority of the reviewed studies employ a qualitative approach which often involves a triangulation of ethnographic research methods. Future research that draws on qualitative approaches is recommended due to its potential to offer rich interpretations of complex phenomena, considering multiple layers and perspectives, as well as people's linguistic practices, beliefs, and values (Bonacina-Pugh et al., 2021). This is particularly significant given the embeddedness of translanguaging practices in the wider language dynamics and social processes which characterise particular learning settings as well as the fact that many mainstream classrooms are linguistically superdiverse. Furthermore, we propose that an additional avenue is to conduct design-based or (explorative/critical) action research in local collaborative partnerships in combination with ethnographic or mixed methods research. Such research can provide further insights into how and when the leveraging processes work. Finally, if measuring effectiveness is the sought-after aim, future research could involve longitudinal cohort studies or experimental studies; in particular, experimental studies can also have the potential to examine the underlying mechanisms and the potential challenges for the individual when engaging in translanguaging. Our position in the debate regarding the methodological underpinnings of future studies focused on translanguaging (e.g., Anderson, 2023; Bonacina-Pugh et al., 2021; Li, 2022; Prilutskaya, 2021; Treffers-Daller, 2023) is that each approach can contribute significant empirical evidence and can help inform a comprehensive understanding of the topic.

Finally, more attention needs to be paid to the specific socio-historical conditions and power relations involved in the emergence and promotion of translanguaging practices. Following Jaspers (2018), we highlight that a sole attention to language risks invisibilising other structural elements that may mark the dynamics of social (in)equality. Similar to authors such as Ortiz et al. (2020) and Al Battashi (2022), we advocate a broader perspective that focuses on how the intersection between categories such as language(s), race, class, and gender marks the learning trajectory of multilingual children with a migration background.

Implications for policy and practice

First, the findings show that the challenges to and favourable conditions for translanguaging in school settings respond to broader dynamics involving ideological stances as well as national or institutional policies, rather than (only) classroom and discipline-specific aspects.

An implication for practice is that efforts towards translanguaging in content classrooms need to consider the entire linguistic ecology of an institution and prioritise the agency of the children, families, and educators, rather than providing (only) top-down technical, discipline-based solutions. It is also important to note the asymmetry between efforts to maintain a monolingual norm and efforts to implement a translanguaging approach in light of the socio-historical prevalence of the former. Consequently, policy makers and educators should consider that the shift from a monolingual to a translanguaging approach cannot take place automatically once (classroom) norms are established, may need time and effort to be successfully implemented and, therefore, requires investment from all agents involved. In turn, careful attention should be paid to the expectations around and evaluation of such interventions; in some cases, the outcomes of translanguaging may be identifiable when a more comprehensive approach towards learners is employed, rather than standardised measurements aiming to show effectiveness in a short amount of time.

Second, engaging in professional development seems to be a key beneficial endeavour for all educators interested in promoting translanguaging. Professional development can focus on elements such as examining the role of language in reproducing social asymmetries; reflecting on the potential benefits of reframing home languages as resources in children's learning trajectories; and learning how to design disciplinary content classes, tasks, and assessments that take into consideration children's entire linguistic and cultural repertoire.

Third, a recommendation is for educators to trust that children will engage with content, to allow themselves to not have the control at all times, and to adopt a comprehensive view of the child by legitimising their knowledge, skills, and voice, even if it is in a language not shared by everybody in the classroom.

Fourth, at the policy and institutional levels it may be significant to reflect on how the curriculum impacts social (in)equality and the role that language plays in such dynamics. Strongly linked, it is recommended for policy makers and educators to critically engage with the consequences of monolingual assessment policies, particularly for newcomer children. If a translanguaging pedagogical approach is desired, schools should also consider how time is allocated, both inside and outside the classroom, and the fact that a collaboration between school leaders, educators, children, and families can represent a potentially rich line of action.

Fifth, a sole focus on translanguaging might not be sufficient to profoundly modify social asymmetries and solve all challenges that multilingual children face within institutional settings. Consequently, it is worth considering how translanguaging can complement other critical and social justice approaches in education, such as culturally responsive teaching (Moody & Matthews, 2020), dialogic teaching (Planas & Chronaki, 2021), funds of knowledge (Wilson-Lopez & Acosta-Feliz, 2022), pedagogies of care (Qin & Llosa, 2023), or decolonial pedagogies (Li & García, 2022).

In conclusion, this systematic review contributes to the key debates around translanguaging involving the home languages of multilingual children with a migration background within and across multiple learning settings engaged in disciplinary content learning. We hope that this study will be of interest to scholars, educators, and families who are trying to visibilise and valorise linguistic minoritised children's voices as a way towards social equality.

AUTHOR CONTRIBUTIONS

Mirona Moraru: Conceptualization; methodology; formal analysis; investigation; writing – original draft. **Arthur Bakker:** Conceptualization; methodology; writing – review and editing; supervision; project administration; funding acquisition. **Sanne Akkerman:** Conceptualization; writing – review and editing. **Linda Zenger:** Writing – review and

editing; investigation. **Jantien Smit:** Conceptualization; writing – review and editing; funding acquisition. **Elma Blom:** Conceptualization; writing – review and editing; supervision; funding acquisition.

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Data sharing is not applicable to this article as no new data were created or analysed in this study.

ETHICS STATEMENT
No ethics agreement was required for this project given that only previously published material was employed.

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Endnotes
[1] This group is understood here from a broad perspective, including children and youth who have at least emerging competence in two named languages, a home language and a mainstream language, and count with a family history of migration, regardless of generation.

[2] Here, the dominant language in society and, most often, the language of instruction at school.

[3] Here, an often minoritised named language linked to migration which is learned and employed mainly at home.

[4] Here, classrooms where the focus is on language as a medium of instruction and not as a subject of instruction. Henceforth 'content classrooms'.

REFERENCES
Afitska, O. (2020). Translanguaging in diverse multilingual classrooms in England: Oasis or a mirage? *The European Journal of Applied Linguistics and TEFL*, *9*(1), 153–181.

Akkerman, S. F., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research*, *81*(2), 132–169. https://doi.org/10.3102/0034654311404435

Akkerman, S. F., & Bakker, A. (2019). Persons pursuing multiple objects of interest in multiple contexts. *European Journal of Psychology of Education*, *34*(1), 1–24. https://doi.org/10.1007/s10212-018-0400-2

Al Battashi, S. K. M. (2022). *Translanguaging and young Muslim children's negotiations of intersectional Muslim identities in an English reception classroom: A linguistic ethnographic study* (Doctoral thesis). University College London.

Alisaari, J., Heikkola, L. M., Commins, N., & Acquah, E. O. (2019). Monolingual ideologies confronting multilingual realities. Finnish teachers' beliefs about linguistic diversity. *Teaching and Teacher Education*, *80*(1), 48–58. https://doi.org/10.1016/j.tate.2019.01.003

Anderson, J. (2023). Translanguaging: A paradigm shift for ELT theory and practice. *ELT Journal*, *78*(1), 72–81. https://doi.org/10.1093/elt/ccad057

Anderson, P., Stewart, M. A., & Lozada, V. A. (2022). Language, literacy, and love: A critical framework for teaching adolescent emergent bilinguals. *Journal of Language and Literacy Education*, *18*(1), 1–20. https://eric.ed.gov/?id=EJ1358428

Aromataris, E., Lockwood, C., Porritt, K., Pilla, B., & Jordan, Z. (2024). *JBI manual for evidence synthesis*. JBI. https://doi.org/10.46658/JBIMES-24-01

Ascenzi-Moreno, L., Hesson, S., & Menken, K. (2016). School leadership along the trajectory from monolingual to multilingual. *Language and Education*, *30*(3), 197–218. https://doi.org/10.1080/09500782.2015.1093499

Asfaha, Y., Spotti, M., & Idris, K. (2023). Translingual pedagogies in the global south: Review of classroom practices and interventions. In C. McKinney, P. Makoe, & V. Zavala (Eds.), *The Routledge handbook of multilingualism* (pp. 252–268). Routledge. https://doi.org/10.4324/9781003214908-20

Axelrod, Y., & Cole, M. W. (2018). 'The pumpkins are coming…vienen las calabazas…that sounds funny': Translanguaging practices of young emergent bilinguals. *Journal of Early Childhood Literacy*, *18*(1), 129–153. https://doi.org/10.1177/1468798418754938

Back, M. (2020). "It is a village": Translanguaging pedagogies and collective responsibility in a rural school district. *TESOL Quarterly*, *54*(4), 900–924. https://doi.org/10.1002/tesq.562

Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Multilingual Matters.

Blackledge, A. (2001). The wrong sort of capital? Bangladeshi women and their children's schooling in Birmingham, UK. *International Journal of Bilingualism*, *5*(3), 345–369. https://doi.org/10.1177/13670069010050030501

Blair, A. (2016). Academic uses of language (re)defined: A case of emergent bilinguals engaging in languages and literacies in and outside of school. *Linguistics and Education*, *35*(1), 109–119. https://doi.org/10.1016/j.linged.2016.07.003

Block, D. (2018). The political economy of language education research (or the lack thereof): Nancy Fraser and the case of translanguaging. *Critical Inquiry in Language Studies*, *15*(4), 237–257. https://doi.org/10.1080/15427587.2018.1466300

Blommaert, J., Creve, L., & Willaert, E. (2006). On being declared illiterate: Language-ideological disqualification in Dutch classes for immigrants in Belgium. *Language & Communication*, *26*(1), 34–54. https://doi.org/10.1016/j.langcom.2005.03.004

Bonacina-Pugh, F., da Costa Cabral, I., & Huang, J. (2021). Translanguaging in education. *Language Teaching*, *54*(4), 439–471. https://doi.org/10.1017/S0261444821000173

Bonomi, M. (2020). Mi(s) lengua(s): Educational paths for Hispanic students within Italian school. *Journal of Multilingual and Multicultural Development*, *41*(1), 45–58. https://doi.org/10.1080/01434632.2019.1621875

Bosma, E., Bakker, A., Zenger, L., & Blom, E. (2023). Supporting the development of the bilingual lexicon through translanguaging: A realist review integrating psycholinguistics with educational sciences. *European Journal of Psychology of Education*, *38*(1), 225–247. https://doi.org/10.1007/s10212-021-00586-6

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Camenzuli, R., Lundberg, A., & Gauci, P. (2023). Collective teachers' beliefs about multilingualism in Maltese primary education. *International Journal of Bilingual Education and Bilingualism*, *26*(4), 379–394. https://doi.org/10.1080/13670050.2022.2114787

Canagarajah, S. (2011a). Codemeshing in academic writing: Identifying teachable strategies of translanguaging. *The Modern Language Journal*, *95*(3), 401–417. https://doi.org/10.1111/j.1540-4781.2011.01207.x

Canagarajah, S. (2011b). Translanguaging in the classroom: Emerging issues for research and pedagogy. *Applied Linguistics Review*, *2*(1), 1–28. https://doi.org/10.1515/9783110239331.1

Carbonara, V., & Scibetta, A. (2022). Integrating translanguaging pedagogy into Italian primary schools: Implications for language practices and children's empowerment. *International Journal of Bilingual Education and Bilingualism*, *25*(3), 1049–1069. https://doi.org/10.1080/13670050.2020.1742648

Castro, S. I. (2021). A translanguaging stance on theatre education. In L. S. Brenner, C. Ceraso, E. D. Cruz, & C. Baker (Eds.), *Applied theatre with youth: Education, engagement, activism* (pp. 54–58). Taylor and Francis Inc. https://doi.org/10.4324/9781003039419

Cataldo-Schwarzl, L. (2022). Invisible. Inaudible. Marginalised: Unique languages in a superdiverse translanguaging-classroom. *Journal of Multilingual and Multicultural Development*, *45*, 1–14. https://doi.org/10.1080/01434632.2022.2044831

Cenoz, J. (2017). Translanguaging in school contexts: International perspectives. *Journal of Language, Identity & Education*, *16*(4), 193–198. https://doi.org/10.1080/15348458.2017.1327816

Cenoz, J., & Gorter, D. (2014). Focus on multilingualism as an approach in educational contexts. In A. Blackledge & A. Creese (Eds.), *Heteroglossia as practice and pedagogy* (pp. 239–254). Springer.

Chaka, C. (2020). Translanguaging, decoloniality, and the global south: An integrative review study. *Scrutiny2*, *25*(1), 6–42. https://doi.org/10.1080/18125441.2020.1802617

Charamba, E. (2022). Pushing linguistic boundaries: Translanguaging in a bilingual science and technology classroom. *Journal of Multilingual and Multicultural Development*, *43*(10), 951–965. https://doi.org/10.1080/01434632.2020.1783544

Choi, M.-S. (2022). A sojourning multilingual family's sense-making in a science museum: A repertoire approach. *Linguistics and Education*, *72*, 1–12. https://doi.org/10.1016/j.linged.2022.101106
Christensen, M. V. (2022). Math in Arabic and other languages: Exploring the possibilities of translanguaging practices in the classroom. *International Journal of Multilingualism*, *21*, 1–16. https://doi.org/10.1080/14790718.2022.2085711
Chronaki, A., & Planas, N. (2018). Language diversity in mathematics education research: A move from language as representation to politics of representation. *ZDM: Mathematics Education*, *50*(6), 1101–1111. https://doi.org/10.1007/s11858-018-0942-4
Chronaki, A., Planas, N., & Svensson Källberg, P. (2022). Onto/epistemic violence and dialogicality in translanguaging practices across multilingual mathematics classrooms. *Teachers College Record*, *124*(5), 108–126. https://doi.org/10.1177/01614681221104040
Civil, M., & Quintos, B. (2022). Mothers and children doing mathematics together: Implications for teacher learning. *Teachers College Record*, *124*(5), 13–29. https://doi.org/10.1177/01614681221105008
Conteh, J. (2018). Translanguaging as pedagogy—A critical review. In A. Creese & A. Blackledge (Eds.), *The Routledge handbook of language and superdiversity: An interdisciplinary perspective* (pp. 473–487). Routledge.
Conteh, J., & Meier, G. (2014). *The multilingual turn in languages education: Opportunities and challenges*. Multilingual Matters. https://doi.org/10.21832/9781783092246
Creese, A., & Blackledge, A. (2015). Translanguaging and identity in educational settings. *Annual Review of Applied Linguistics*, *35*, 20–35. https://doi.org/10.1017/S0267190514000233
Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Multilingual Matters. https://doi.org/10.21832/9781853596773
Cummins, J. (2008). Teaching for transfer: Challenging the two solitudes assumption in bilingual education. In N. H. Hornberger (Ed.), *Encyclopedia of language and education*. Springer US. https://doi.org/10.1007/978-0-387-30424-3_116
Cummins, J. (2019). The emergence of Translanguaging pedagogy: A dialogue between theory and practice. *Journal of Multilingual Education Research*, *9*, 19–36. https://fordham.bepress.com/jmer/vol9/iss1/13
Cunningham, C., & Little, S. (2022). 'Inert benevolence' towards languages beyond English in the discourses of English primary school teachers. *Linguistics and Education*, *78*, 101–122. https://doi.org/10.1016/j.linged.2022.101122
Daniel, S. M. (2018). Resettled refugee youth leveraging their out-of-school literacy practices to accomplish schoolwork. *Mind, Culture, and Activity*, *25*(3), 263–277. https://doi.org/10.1080/10749039.2018.1481092
Daniel, S. M., & Pacheco, M. B. (2016). Translanguaging practices and perspectives of four multilingual teens. *Journal of Adolescent & Adult Literacy*, *59*(6), 653–663. https://doi.org/10.1002/jaal.500
Daniel, S. M., & Zybina, M. (2019). Resettled refugee teens' perspectives: Identifying a need to centralize youths' "funds of strategies" in future efforts to enact culturally responsive pedagogy. *The Urban Review*, *51*(3), 345–368. https://doi.org/10.1007/s11256-018-0484-7
David, S. S., Shepard-Carey, L., Swearingen, A. J., Hemsath, D. J., & Heo, S. (2022). Entry points and trajectories: Teachers learning and doing translanguaging pedagogy. *TESOL Journal*, *13*(1), e603. https://doi.org/10.1002/tesj.603
Dávila, L. T., & Bunar, N. (2020). Translanguaging through an advocacy lens: The roles of multilingual classroom assistants in Sweden. *European Journal of Applied Linguistics*, *8*(1), 107–126. https://doi.org/10.1515/eujal-2019-0012
de los Ríos, C. V. (2018). Bilingual vine making: Problematizing oppressive discourses in a secondary Chicanx/Latinx studies course. *Learning, Media and Technology*, *43*(4), 359–373. https://doi.org/10.1080/17439884.2018.1498350
Degano, S., & Kirsch, C. (2020). Moving beyond language(s): A case study on a newcomer's translanguaging practices. *European Journal of Applied Linguistics*, *8*(2), 181–201. https://doi.org/10.1515/eujal-2020-0005
Deroo, M. R. (2020). Translanguaging pedagogy to support bi/multilingual students' language learning in social studies: "How we communicate everything". In A. Slapac & S. A. Coppersmith (Eds.), *Beyond language learning instruction: Transformative supports for emergent bilinguals and educators* (pp. 233–261). IGI Global. https://doi.org/10.4018/978-1-7998-1962-2.ch010
Deroo, M. R., & Ponzio, C. (2019). Confronting ideologies: A discourse analysis of in-service teachers' translanguaging stance through an ecological lens. *Bilingual Research Journal*, *42*(2), 214–231. https://doi.org/10.1080/15235882.2019.1589604
DiNapoli, J., & Morales, H. J. (2021). Translanguaging to persevere is key for Latinx bilinguals' mathematical success. *Journal of Urban Mathematics Education*, *14*(2), 71–104. https://doi.org/10.21423/jume-v14i2a390
Duarte, J. (2019). Translanguaging in mainstream education: A sociocultural approach. *International Journal of Bilingual Education and Bilingualism*, *22*(2), 150–164. https://doi.org/10.1080/13670050.2016.1231774
Duarte, J. (2020). Translanguaging in the context of mainstream multilingual education. *International Journal of Multilingualism*, *17*(2), 232–247. https://doi.org/10.1080/14790718.2018.1512607

D'warte, J. (2020). Recognizing and leveraging the bilingual meaning-making potential of young people aged six to eight years old in one Australian classroom. *Journal of Early Childhood Literacy*, *20*(2), 296–326. https://doi.org/10.1177/1468798418769361

Espinet, I. (2021). Newcomers as teachers: Enacting linguistic ideologies and practices in an internship setting. *Journal of Language, Identity & Education*, *22*(6), 1–15. https://doi.org/10.1080/15348458.2021.1938571

Fine, C. G. M. (2022). Translanguaging interpretive power in formative assessment co-design: A catalyst for science teacher agentive shifts. *Journal of Language, Identity & Education*, *21*(3), 191–211. https://doi.org/10.1080/15348458.2022.2058858

Fisher, D. (1989). Boundary work: A model of the relation between power and knowledge. *Science Communication*, *10*(2), 156–176. https://doi.org/10.1177/0164025988010002004

French, M. (2016). Students' multilingual resources and policy-in-action: An Australian case study. *Language and Education*, *30*(4), 298–316. https://doi.org/10.1080/09500782.2015.1114628

Fry, R. (2007). How far behind in math and reading are English language learners? Report.

Fuster, C., & Bardel, C. (2024). Translanguaging in Sweden: A critical review from an international perspective. *System*, *121*, 103241. https://doi.org/10.1016/j.system.2024.103241

García, O. (2009). *Bilingual education in the 21st century: A global perspective*. Wiley-Blackwell.

García, O., Flores, N., & Chu, H. (2011). Extending bilingualism in U.S. secondary education: New variations. *International Multilingual Research Journal*, *5*(1), 1–18. https://doi.org/10.1080/19313152.2011.539486

García, O., & Kleifgen, J. A. (2020). Translanguaging and literacies. *Reading Research Quarterly*, *55*(4), 553–571. https://doi.org/10.1002/rrq.286

García, O., & Leiva, C. (2014). Theorizing and enacting translanguaging for social justice. In A. Blackledge, A. Creese, A. Blackledge, & A. Creese (Eds.), *Heteroglossia as practice and pedagogy* (pp. 199–216). Springer Netherlands. https://doi.org/10.1007/978-94-007-7856-6_11

García, O., & Li, W. (2014a). Translanguaging and education. In O. García & W. Li (Eds.), *Translanguaging: Language, bilingualism and education* (pp. 63–77). Palgrave Macmillan UK. https://doi.org/10.1057/9781137385765_5

García, O., & Li, W. (2014b). The translanguaging turn and its impact. In O. García & W. Li (Eds.), *Translanguaging: Language, bilingualism and education* (pp. 19–44). Palgrave Macmillan UK. https://doi.org/10.1057/9781137385765_3

García, O., & Lin, A. M. Y. (2017). Translanguaging in bilingual education. In *Bilingual and multilingual education* (pp. 117–130). Springer. https://doi.org/10.1007/978-3-319-02258-1_9

García, O., Woodley, H. H., Flores, N., & Chu, H. (2013). Latino emergent bilingual youth in high schools:Transcaring strategies for academic success. *Urban Education*, *48*(6), 798–827. https://doi.org/10.1177/0042085912462708

Gieryn, T. F. (1983). Boundary-Work and the Demarcation of Science from Non-science: Strains and Interests in Professional Ideologies of Scientists. *American Sociological Review*, *48*(6), 781–795.

Gieryn, T. F. (1999). *Cultural Boundaries of Science: Credibility on the Line*. University of Chicago Press.

Gogolin, I. (1997). The "monolingual habitus" as the common feature in teaching in the language of the majority in different countries. *Per Linguam*, *13*(2), 38–49. https://doi.org/10.5785/13-2-187

Gogolin, I. (2011). The challenge of super diversity for education in Europe. *Education Inquiry*, *2*(2), 239–249. https://doi.org/10.3402/edui.v2i2.21976

Gogolin, I. (2021). Multilingualism: A threat to public education or a resource in public education?—European histories and realities. *European Educational Research Journal*, *20*(3), 297–310. https://doi.org/10.1177/1474904120981507

Gynne, A. (2019). 'English or Swedish please, no Dari!'—(Trans)Languaging and language policing in upper secondary school's language introduction programme in Sweden. *Classroom Discourse*, *10*(3–4), 347–368. https://doi.org/10.1080/19463014.2019.1628791

Hernandez Garcia, M., & Schleppegrell, M. J. (2021). Culturally sustaining disciplinary literacy for bi/multilingual learners: Creating a translanguaging social studies classroom. *Journal of Adolescent & Adult Literacy*, *64*(4), 449–454. https://doi.org/10.1002/jaal.1129

Heugh, K. (2021). Southern multilingualisms, translanguaging and transknowledging in inclusive and sustainable education. In P. Harding-Esch & H. Coleman (Eds.), *Language and the sustainable development goals*. British Council.

Hopkyns, S., & Hillman, S. (2024). Translanguaging in GCC English-medium higher education: A scoping review. In D. Yuksel, M. Altay, & S. Curle (Eds.), *Multilingual and translingual practices in English-medium instruction: Perspectives from global higher education contexts*. Bloomsbury Publishing.

Huang, X., & Chalmers, H. (2023). Implementation and effects of pedagogical translanguaging in EFL classrooms: A systematic review. *Language*, *8*(3), 1–20. https://doi.org/10.3390/languages8030194

Iversen, J. Y. (2020). Pre-service teachers' translanguaging during field placement in multilingual, mainstream classrooms in Norway. *Language and Education*, *34*(1), 51–65. https://doi.org/10.1080/09500782.2019.1682599

Jaspers, J. (2018). The transformative limits of translanguaging. *Language & Communication*, *58*, 1–10.
Jaspers, J., & Madsen, L. M. (2019). Fixity and fluidity in sociolinguistic theory and practice. In J. Jaspers & L. M. Madsen (Eds.), *Critical perspectives on linguistic fixity and fluidity* (pp. 1–26). Routledge.
Jonsson, C. (2017). 3. Translanguaging and ideology: Moving away from a monolingual norm. In P. BethAnne, R. Jenny, S. Boglárka, & W. Åsa (Eds.), *New perspectives on translanguaging and education* (pp. 20–37). Multilingual Matters. https://doi.org/10.21832/9781783097821-004
Kakos, M. (2022). A third space for inclusion: Multilingual teaching assistants reporting on the use of their marginal position, translation and translanguaging to construct inclusive environments. *International Journal of Inclusive Education*, *29*, 1–16. https://doi.org/10.1080/13603116.2022.2073060
Karafylli, M., & Maligkoudi, C. (2023). Educators' perspectives on translanguaging schoolscape and language education for refugee students in Greek educational settings. *Education Inquiry*, *14*(3), 306–335. https://doi.org/10.1080/20004508.2021.2019374
Karlsson, A., Nygård Larsson, P., & Jakobsson, A. (2019). Multilingual students' use of translanguaging in science classrooms. *International Journal of Science Education*, *41*(15), 2049–2069. https://doi.org/10.1080/09500693.2018.1477261
Karlsson, A., Nygård Larsson, P., & Jakobsson, A. (2020). The continuity of learning in a translanguaging science classroom. *Cultural Studies of Science Education*, *15*(1), 1–25. https://doi.org/10.1007/s11422-019-09933-y
Kayi-Aydar, H., & Green-Eneix, C. (2019). Shared identities through translanguaging practices in the multilingual mariachi classroom. *TESOL Journal*, *10*(4), 1–17. https://doi.org/10.1002/tesj.502
Kerekes, J., Rajendram, S., Owoo, M. A.-N., & Zhang, Y. (2022). Teachers' takes on supporting multilingual learners in K-12 classrooms in Ontario. *TESL Canada journal*, *38*(1), 1–27. https://doi.org/10.18806/tesl.v38i1.1365
Kibler, A. K., Palacios, N., Simpson-Baird, A., Bergey, R., & Yoder, M. (2016). Bilingual Latin@ children's exposure to language and literacy practices through older siblings in immigrant families. *Linguistics and Education*, *35*, 63–77. https://doi.org/10.1016/j.linged.2016.06.001
Kim, S., & Choi, S. (2021). Teachers' perceptions and practices of translanguaging for emergent bilinguals in U.S. multilingual classrooms. *Translation and Translanguaging in multilingual Contexts*, *7*(3), 279–307. https://doi.org/10.1075/ttmc.00079.kim
Kwon, J. (2022). Parent–child translanguaging among transnational immigrant families in museums. *International Journal of Bilingual Education and Bilingualism*, *25*(2), 436–451. https://doi.org/10.1080/13670050.2019.1689918
Langman, J. (2014). Translanguaging, identity, and learning: Science teachers as engaged language planners. *Language Policy*, *13*(2), 183–200. https://doi.org/10.1007/s10993-013-9312-9
Le Pichon, E., Cummins, J., & Vorstman, J. (2021). Using a web-based multilingual platform to support elementary refugee students in mathematics. *Journal of Multilingual and Multicultural Development*, *45*, 1–17. https://doi.org/10.1080/01434632.2021.1916022
Lee, T.-K. (2015). Translanguaging and visuality: Translingual practices in literary art. *Applied Linguistics Review*, *6*(4), 441–465. https://doi.org/10.1515/applirev-2015-0022
Lemmi, C., Brown, B., Wild, A., Zummo, L., & Sedlacek, Q. (2019). Language ideologies in science education. *Science Education*, *103*, 1–21. https://doi.org/10.1002/sce.21508
Lewis, G., Jones, B., & Baker, C. (2012a). Translanguaging: Developing its conceptualisation and contextualisation. *Educational Research and Evaluation*, *18*(7), 655–670. https://doi.org/10.1080/13803611.2012.718490
Lewis, G., Jones, B., & Baker, C. (2012b). Translanguaging: Origins and development from school to street and beyond. *Educational Research and Evaluation*, *18*(7), 641–654. https://doi.org/10.1080/13803611.2012.718488
Li, G., & Qin, K. (2022). Supporting and advocating for immigrant and refugee students and families in America's urban schools: Educators' agency and practices in everyday instruction. *Urban Education*, *59*, 600–628. https://doi.org/10.1177/00420859221082671
Li, W. (2022). Translanguaging as method. *Research Methods in Applied Linguistics*, *1*(3), 100026. https://doi.org/10.1016/j.rmal.2022.100026
Li, W., & García, O. (2022). Not a first language but one repertoire: Translanguaging as a decolonizing project. *RELC Journal*, *53*(2), 313–324. https://doi.org/10.1177/00336882221092841
Linares, R. E. (2021). “Para que los demás se diviertan un poco”: Negotiating social interactions in a culturally and linguistically diverse classroom. *Journal of Language, Identity & Education*, *23*, 1–15. https://doi.org/10.1080/15348458.2021.1986398
Little, D., & Kirwan, D. (2017). Translanguaging as a key to educational success: The experience of one Irish primary school. In P. Van Avermaet, S. Slembrouck, K. Van Gorp, S. Sierens, & K. Maryns (Eds.), *The multilingual edge of education* (pp. 313–340). Palgrave Macmillan. https://doi.org/10.5040/9781350072053
Lopez, A. A. (2023). Examining how Spanish-speaking English language learners use their linguistic resources and language modes in a dual language mathematics assessment task. *Journal of Latinos and Education*, *22*(1), 198–210. https://doi.org/10.1080/15348431.2020.1731693

Lu, C., Gu, M. M., & Lee, J. C.-K. (2023). A systematic review of research on translanguaging in EMI and CLIL classrooms. *International Journal of Multilingualism*, *22*, 1–21. https://doi.org/10.1080/14790718.2023.2256775

Lundberg, A. (2019). Teachers' beliefs about multilingualism: Findings from Q method research. *Current Issues in Language Planning*, *20*(3), 266–283. https://doi.org/10.1080/14664208.2018.1495373

Machado, E. (2017). Fostering and sustaining diverse literacy practices in the early childhood classroom: Reviewing the literature in three areas. *Literacy Research: Theory, Method, and Practice*, *66*(1), 309–324. https://doi.org/10.1177/2381336917718178

Mallinson, C. (2024). Linguistic variation and linguistic inclusion in the US educational context. *Annual review of Linguistics*, *10*(1), 37–57. https://doi.org/10.1146/annurev-linguistics-031120-121546

Martini, S., & Torregrossa, J. (2023). Developing compound awareness by translanguaging: The design of learning activities for multilingual classrooms. In P. Bayona & E. García-Martín (Eds.), *second language and heritage learners in mixed classrooms* (pp. 293–318). Multilingual Matters. https://doi.org/10.21832/9781800415027-015

Martin-Jones, M. (2007). Bilingualism, education and the regulation of access to language resources. In M. Heller (Ed.), *Bilingualism: A social approach* (pp. 161–182). Palgrave Macmillan UK. https://doi.org/10.1057/9780230596047_8

May, S. (2014). Introducing the "multilingual turn". In S. May (Ed.), *The multilingual turn. Implications for SLA, TESOL and bilingual education* (pp. 1–6). Routledge.

McCarthey, S. J., Nuñez, I., & Lee, C. (2020). Translanguaging across contexts. In M. Dressman & R. W. Sadler (Eds.), *The handbook of informal language learning* (pp. 351–367). Wiley-Blackwell.

Mendoza, A., Hamman-Ortiz, L., Tian, Z., Rajendram, S., Tai, K. W. H., Ho, W. Y. J., & Sah, P. K. (2023). Sustaining critical approaches to translanguaging in education: A contextual framework. *TESOL Quarterly*, *58*, 664–692. https://doi.org/10.1002/tesq.3240

Menken, K. (2013). Emergent bilingual students in secondary school: Along the academic language and literacy continuum. *Language Teaching*, *46*(4), 438–476. https://doi.org/10.1017/S0261444813000281

Menken, K., & Sánchez, M. T. (2019). Translanguaging in English-only schools: From pedagogy to stance in the disruption of monolingual policies and practices. *TESOL Quarterly*, *53*(3), 741–767. https://doi.org/10.1002/tesq.513

Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook*. SAGE Publications.

Moody, S. M., & Matthews, S. D. (2020). Pathways to becoming a culturally responsive teacher: Narrative inquiries into a translanguaging read aloud. *Journal of curriculum studies research*, *2*(2), 170–188. https://doi.org/10.46303/jcsr.2020.15

Morales, H., & DiNapoli, J. (2018). Latinx bilingual students' perseverance on a mathematical task: A rehumanizing perspective. *Journal of Research in Mathematics Education*, *7*(3), 226–250. https://doi.org/10.17583/redimat.2018.3274

Moraru, M. (2019). Toward a Bourdieusian theory of multilingualism. *Critical Inquiry in Language Studies*, *17*(2), 79–100. https://doi.org/10.1080/15427587.2019.1574578

Muller, S., Schmidt, C., & Weber, J.-J. (2019). Perceived legitimacy and translanguaging: Exploring the interconnectedness of pedagogy and policy. In K. Horner & J. Dailey-O'Cain (Eds.), *Multilingualism, (im)mobilities and spaces of belonging* (pp. 177–196). Multilingual Matters. https://doi.org/10.21832/9781788925051-012

Nap, L. S., Hiddink, F. C., & Duarte, J. (2023). 'Do you know a few words?'—Developing an evidence-based model to analyse multilingual classroom interaction. *International Journal of Bilingual Education and Bilingualism*, *26*(7), 904–917. https://doi.org/10.1080/13670050.2022.2132108

Nuñez, I., & Garcia-Mateus, S. (2021). Ruptures of possibility: Mexican origin mothers as critical border pedagogues. *Association of Mexican American Educators Journal*, *15*(3), 107–125. https://doi.org/10.24974/amae.15.3.448

Nygård Larsson, P., & Jakobsson, A. (2017). Semantiska vågor–elevers diskursiva rörlighet i gruppsamtal. *Nordic Studies in Science Education*, *13*(1), 17–35.

Ollerhead, S. (2020). 'The pre-service teacher tango': Pairing literacy and science in multilingual Australian classrooms. *International Journal of Science Education*, *42*(14), 2493–2512. https://doi.org/10.1080/09500693.2019.1634852

Ollerhead, S., Crealy, I., & Kirk, R. (2020). Writing like a health scientist: A translingual approach to teaching text structure in a diverse Australian classroom. *Australian journal of Applied Linguistics*, *3*(1), 77–90. https://doi.org/10.29140/ajal.v3n1.301

Orman, J. (2013). New lingualisms, same old codes. *Language Sciences*, *37*, 90–98. https://doi.org/10.1016/j.langsci.2012.12.001

Ortiz, A. A., Fránquiz, M. E., & Lara, G. P. (2020). Applying an intersectionality lens to education policy and practice for emergent bilinguals. *Bilingual Research Journal*, *43*(4), 357–361. https://doi.org/10.1080/15235882.2020.1896310

Özkaynak, O. (2023). Translanguaging in applied linguistics: A comprehensive systematic review. *L2 Journal: An Electronic Refereed Journal for Foreign and Second Language Educators*, *15*(1), 1–23. https://doi.org/10.5070/L2.2460

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, *372*(71), 1–9. https://doi.org/10.1136/bmj.n71

Panagiotopoulou, J. A., & Rosen, L. (2018). Denied inclusion of migration-related multilingualism: An ethnographic approach to a preparatory class for newly arrived children in Germany. *Language and Education*, *32*(5), 394–409. https://doi.org/10.1080/09500782.2018.1489829

Patiño-Santos, A. (2019). When language mixing is the norm: Documenting post-muda language choice in a state school in Barcelona. *International Journal of the Sociology of Language*, *2019*(257), 109–135. https://doi.org/10.1515/ijsl-2019-2022

Perera, N. (2022). Talking Saivism in a Tamil migrant faith classroom. *International Journal of Multilingualism*, *19*(3), 418–434. https://doi.org/10.1080/14790718.2020.1712406

Pierson, A. E., Clark, D. B., & Brady, C. E. (2021). Scientific modeling and translanguaging: A multilingual and multimodal approach to support science learning and engagement. *Science Education*, *105*(4), 776–813. https://doi.org/10.1002/sce.21622

Pierson, A. E., & Grapin, S. E. (2021). A disciplinary perspective on translanguaging. *Bilingual Research Journal*, *44*(3), 318–334. https://doi.org/10.1080/15235882.2021.1970657

Planas, N., & Chronaki, A. (2021). Multilingual mathematics learning from a dialogic-translanguaging perspective. In N. Planas, C. Morgan, & M. Schütte (Eds.), *Classroom research on mathematics and language: Seeing learners and teachers differently*. Routledge.

Poza, L. (2017). Translanguaging: Definitions, implications, and further needs in burgeoning inquiry. *Berkeley Review of Education*, *6*(2), 101–128. https://doi.org/10.5070/B86110060

Prediger, S., Kuzu, T., Schüler-Meyer, A., & Wagner, J. (2019). One mind, two languages—Separate conceptualisations? A case study of students' bilingual modes for dealing with language-related conceptualisations of fractions. *Research in Mathematics Education*, *21*(2), 188–207. https://doi.org/10.1080/14794802.2019.1602561

Prilutskaya, M. (2021). Examining pedagogical translanguaging: A systematic review of the literature. *Language*, *6*(4), 180. https://doi.org/10.3390/languages6040180

Putjata, G., & Koster, D. (2023). 'It is okay if you speak another language, but…': Language hierarchies in mono- and bilingual school teachers' beliefs. *International Journal of Multilingualism*, *20*(3), 891–911. https://doi.org/10.1080/14790718.2021.1953503

Qin, K., & Beauchemin, F. (2022). "Everybody has to be with everybody": Languaging relational and intellectual work with multilingual learners in a science class community. *Linguistics and Education*, *69*, 1–11. https://doi.org/10.1016/j.linged.2022.101019

Qin, K., & Llosa, L. (2023). Translingual caring and translingual aggression: (Re)centering criticality in the research and practice of translanguaging pedagogy. *The Modern Language Journal*, *107*(3), 713–733. https://doi.org/10.1111/modl.12868

Ramirez, P., & Jaffee, A. T. (2022). Creating language spaces with bilingual youth to expand conversations about students' communities and civic experiences. *International Journal of Bilingual Education and Bilingualism*, *25*(7), 2347–2362. https://doi.org/10.1080/13670050.2021.1909530

Ramirez, P. C., & Salinas, C. (2021). Reimagining language space with bilingual youth in a social studies classroom. *Bilingual Research Journal*, *44*(4), 409–425. https://doi.org/10.1080/15235882.2021.1994054

Rojo, L. M. (2010). *Constructing inequality in multilingual classrooms*. De Gruyter Mouton. https://doi.org/10.1515/9783110226645

Rosa, J. (2019). *Looking like a language, sounding like a race: Raciolinguistic ideologies and the learning of Latinidad*. Oxford Studies in Anthropology of Language. Oxford University Press. https://doi.org/10.1093/oso/9780190634728.001.0001

Rosén, J., Straszer, B., & Wedin, Å. (2020). Användning av språkliga resurser i studiehandledning på modersmålet. *Pedagogisk Forskning i Sverige*, *25*(2–3), 26–48. https://doi.org/10.15626/pfs25.0203.02

Rosiers, K., Van Lancker, I., & Delarue, S. (2018). Beyond the traditional scope of translanguaging: Comparing translanguaging practices in Belgian multilingual and monolingual classroom contexts. *Language & Communication*, *61*, 15–28. https://doi.org/10.1016/j.langcom.2017.11.0032018

Ryan, U., Källberg, P. S., & Boistrup, L. B. (2021). 'Language-as-resource' in multilingual mathematics activities: An epistemological framework. *For the Learning of Mathematics*, *41*(2), 8–13.

Ryu, M. (2019). Mixing languages for science learning and participation: An examination of Korean-English bilingual learners in an after-school science-learning programme. *International Journal of Science Education*, *41*(10), 1303–1323. https://doi.org/10.1080/09500693.2019.1605229

Saldaña, J. (2013). *The coding manual for qualitative researchers*. Sage.

Salmerón, C. (2022). Elementary translanguaging writing pedagogy: A literature review. *Journal of Literacy Research*, *54*(3), 222–246. https://doi.org/10.1177/1086296x221117188

Sánchez, M. T., & Espinet, I. (2021). Transforming our classrooms to embrace students' multilingualism through translanguaging pedagogy. In M. Latisha, a.-B. Krüger, & a. S. Young (Eds.), *migration, multilingualism and education* (pp. 169–184). Multilingual Matters. https://doi.org/10.21832/9781800412958-012

Schastak, M., Decristan, J., Rauch, D., & Reitenbach, V. (2022). The prevalence of bilingual interaction in peer-learning. *International Journal of Bilingual Education and Bilingualism*, *25*(6), 1961–1975. https://doi.org/10.1080/13670050.2020.1835812

Scibetta, A., & Carbonara, V. (2020). Unveiling discourses on interculturality and identity construction in primary schools in Italy: A study based on translanguaging pedagogy. *Journal of Multicultural Discourses*, *15*(4), 422–435. https://doi.org/10.1080/17447143.2020.1768397

Seilstad, B., & Kim, S. (2020). "Colibrí" 'hummingbird' as translanguaging metaphor. In Z. Tian, L. Aghai, P. Sayer, & J. L. Schissel (Eds.), *Envisioning TESOL through a translanguaging lens: Global perspectives* (pp. 253–273). Springer International Publishing. https://doi.org/10.1007/978-3-030-47031-9_12

Seilstad, B., Kim, S., & Braun, D. (2021). Languascientific repertoires for adolescent newcomer students: Evidence from a 10th grade biology class in superdiverse Central Ohio. *International Multilingual Research Journal*, *15*(2), 158–177. https://doi.org/10.1080/19313152.2020.18468342021

Shank Lauwo, M. (2021). Literacies and translanguaging in Africa: A critical review of sociocultural perspectives. *Southern African Linguistics and Applied Language Studies*, *39*(2), 210–224. https://doi.org/10.2989/16073614.2021.1934051

Sierens, S., & Ramaut, G. (2018). Breaking out of L2-exclusive pedagogies: Teachers valorizing immigrant pupils' multilingual repertoire in urban Dutch-medium classrooms. In P. Van Avermaet, S. Slembrouck, K. Van Gorp, S. Sierens, & K. Maryns (Eds.), *The multilingual edge of education* (pp. 285–311). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-54856-6_13

Søndergaard Knudsen, H. B., Donau, P. S., Mifsud, C. L., Papadopoulos, T. C., & Dockrell, J. E. (2021). Multilingual classrooms—Danish teachers' practices, beliefs and attitudes. *Scandinavian Journal of Educational Research*, *65*(5), 767–782. https://doi.org/10.1080/00313831.2020.1754903

Straszer, B., Paulsrud, B., & Rosén, J. (2022). Introduction to the special issue on translanguaging in the age of mobility. *Multilingua*, *41*(3), 253–259. https://doi.org/10.1515/multi-2022-0012

Suárez, E. (2020). "Estoy explorando science": Emergent bilingual students problematizing electrical phenomena through translanguaging. *Science Education*, *104*(5), 791–826. https://doi.org/10.1002/sce.21588

Svensson, G. (2020). Möjligheter och utmaningar—lärares uppfattningar av flerspråkighet och transspråkande. *HumaNetten*, *45*, 40–71. https://doi.org/10.15626/hn.20204503

Thompson Klein, J. (1996). *Crossing boundaries: Knowledge, disciplinarities, and interdisciplinarities*. University of Virginia Press.

Thompson Klein, J. (2021). *Beyond interdisciplinarity: Boundary work, communication, and collaboration*. Oxford University Press. https://doi.org/10.1093/oso/9780197571149.001.0001

Ticheloven, A., Blom, E., Leseman, P., & McMonagle, S. (2021). Translanguaging challenges in multilingual classrooms: Scholar, teacher and student perspectives. *International Journal of Multilingualism*, *18*(3), 491–514. https://doi.org/10.1080/14790718.2019.1686002

Torpsten, A.-C. (2018). Translanguaging in a Swedish multilingual classroom. *Multicultural Perspectives*, *20*(2), 104–110. https://doi.org/10.1080/15210960.2018.1447100

Trefers-Daller, J. (2024). Translanguaging: What is it besides smoke and mirrors? *Linguistic Approaches to Bilingualism*, *15*, 1–26. https://doi.org/10.1075/lab.24015.tre

Treffers-Daller, J. (2023). Unravelling translanguaging: A critical appraisal. *ELT Journal*, *78*(1), 64–71. https://doi.org/10.1093/elt/ccad058

Turner, M. (2020). Incorporating Australian primary students' linguistic repertoire into teaching and learning. In Z. Tian, L. Aghai, P. Sayer, & J. L. Schissel (Eds.), *Envisioning TESOL through a translanguaging lens: Global perspectives* (pp. 185–202). Springer International Publishing. https://doi.org/10.1007/978-3-030-47031-9_9

Turner, M., & Lin, A. M. Y. (2020). Translanguaging and named languages: Productive tension and desire. *International Journal of Bilingual Education and Bilingualism*, *23*(4), 423–433. https://doi.org/10.1080/13670050.2017.1360243

Ünsal, Z., Jakobson, B., Molander, B.-O., & Wickman, P.-O. (2018a). Language use in a multilingual class: A study of the relation between bilingual students' languages and their meaning-making in science. *Research in Science Education*, *48*(5), 1027–1048. https://doi.org/10.1007/s11165-016-9597-8

Ünsal, Z., Jakobson, B., Molander, B.-O., & Wickman, P.-O. (2018b). Science education in a bilingual class: Problematising a translational practice. *Cultural Studies of Science Education*, *13*(2), 317–340. https://doi.org/10.1007/s11422-016-9747-3

van der Günther-Meij, M., Duarte, J., & Nap, L. (2020). Including multiple languages in secondary education: A translanguaging approach. *European Journal of Applied Linguistics*, *8*(1), 73–106. https://doi.org/10.1515/eujal-2019-0027

Van Der Wildt, A., Van Avermaet, P., & Van Houtte, M. (2015). Do birds singing the same song flock together? A mixed-method study on language as a tool for changing social homophily in primary schools in Flanders (Belgium). *International Journal of Intercultural Relations*, *49*, 168–182. https://doi.org/10.1016/j.ijintrel.2015.10.002

Van Viegen, S. (2020). Translanguaging for and as learning with youth from refugee backgrounds. *Australian journal of Applied Linguistics*, *3*(1), 60–76. https://doi.org/10.29140/ajal.v3n1.300

Van Viegen Stille, S., Bethke, R., Bradley-Brown, J., Giberson, J., & Hall, G. (2016). Broadening educational practice to include translanguaging: An outcome of educator inquiry into multilingual students' learning needs. *The Canadian Modern Language Review*, *72*(4), 480–503. https://doi.org/10.3138/cmlr.3432

Wedin, Å. (2022). Ideological and implementational spaces for translanguaging in the language introduction programme in Swedish upper secondary school. *Multilingua*, *41*(3), 359–377. https://doi.org/10.1515/multi-2021-0126

Weiss, S., Scharfenberg, J., & Kiel, E. (2023). How can multilingual classrooms scceed? An aalysis of citical incidents. *Journal of Language, Identity & Education*, *22*(5), 445–462. https://doi.org/10.1080/15348458.2021.1886104

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

Williams, C. (1994). *Arfarniad o ddulliau dysgu ac addysgu yng nghyd-destun addysg uwchradd ddwyieithog*. Bangor University.

Wilson-Lopez, A., & Acosta-Feliz, J. (2022). Middle school engineering teachers' enactments of pedagogies rooted in funds of knowledge and translanguaging. *Journal of Pre-College Engineering Education Research*, *12*(1), 60–72. https://doi.org/10.7771/2157-9288.1356

Wu, J. S., Mensah, F. M., & Tang, K.-S. (2018). The content-language tension for English language learners in two secondary science classrooms. In K.-S. Tang & K. Danielsson (Eds.), *Global developments in literacy research for science education* (pp. 113–130). Springer International Publishing. https://doi.org/10.1007/978-3-319-69197-8_8

Xin, S., Ping, W., & Qin, Y. (2021). Twenty years'development of translanguaging: A bibliometric analysis. *International Journal of Multilingualism*, *21*, 1–27. https://doi.org/10.1080/14790718.2021.2007933

Yilmaz, T. (2021). Translanguaging as a pedagogy for equity of language minoritized students. *International Journal of Multilingualism*, *18*(3), 435–454. https://doi.org/10.1080/14790718.2019.1640705

Zavala, V. (2019). Translanguaging pedagogies and power: A view from the south. *Language and Education*, *33*(2), 174–177. https://doi.org/10.1080/09500782.2018.1517779

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