

Commentary

Translanguaging in Bilingual Deaf Education Teacher Preparation Programs

Millicent M. Musyoka

Department of Deaf Studies & Deaf Education, Lamar University, Beaumont, TX 77705, USA;
mmusyoka@lamar.edu

Abstract: Most DHH learners experience language deprivation because they lack full access to a comprehensible language input. Sometimes, this language deprivation continues through school because of the rigid school language policy and teachers' failure to recognize and include all the linguistic repertoires which the learners bring. Like many other teacher education programs, some Deaf education teacher preparation programs have adopted assimilationist ideologies, subtractive approaches to bilingualism that focus on only the majority hearing language, English, or the majority Deaf people's language, such as ASL. Embracing translanguaging improves the implementation of bi/multilingualism in Deaf education by empowering the learner and the teacher to work through these challenges of language deprivation and minority languages in classrooms with Deaf learners. The current article reviews the literature and draws from translanguaging theory and practices, biliteracy, and Crip linguistics to discuss how Deaf education teacher preparation programs can support future teachers in implementing translingual knowledge, skills, and disposition and avoiding linguistic neglect in Deaf learners. In addition, the article will focus on how teachers can value and support the acquisition of all languages beneficial for bi/multilingual Deaf learners to overcome language deprivation and challenges in school.

Keywords: Deaf; translanguaging; Crip linguistics; biliteracy; teacher education



Citation: Musyoka, Millicent M.. 2023. Translanguaging in Bilingual Deaf Education Teacher Preparation Programs. *Languages* 8: 65. <https://doi.org/10.3390/languages8010065>

Academic Editors: Hannah M. Dostal, Leala Holcomb and Glosanda Lawyer

Received: 4 September 2022

Revised: 14 January 2023

Accepted: 6 February 2023

Published: 24 February 2023



Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

According to the [U.S. Census Bureau \(2018\)](#), the estimated number of Deaf or hard of hearing students (DHH) enrolled in K-1 to 12 (ages 5–17) is 308,648. Most (DHH) learners experience language deprivation because they lack full access to a comprehensible language input during the critical period of language acquisition ([Hall et al. 2017](#)). The deprivation begins at home because most DHH learners, 90–95%, are from hearing families, which do not have a shared language with their DHH children ([Kuntze et al. 2016](#); [Mitchell and Karchmer 2005](#)). In addition, some DHH children continue experiencing language deprivation in school because the language policy in Deaf education results from a complex and controversial historical debate on whether to adopt oralism or use sign language. Deaf education programs that adopt sign language believe a DHH learner has a right to be bilingual and advocate sign language and a majority spoken languages, such as English ([Grosjean 2008](#); [Nover et al. 1998](#)). However, like other bilingual programs, language policies can turn bilingual programs rigid and unconstructive and can fail to allow learners to use all their linguistic repertoire to think and express themselves ([Garcia and Wei 2014](#); [Martínez et al. 2015](#)). For language-deprived Deaf learners, how can bilingualism work when they enroll in school lacking language competence ([Erting 2003](#))? Or for multilingual Deaf learners, both those who are language-deprived and whose language(s) differ from the school languages or languages of instruction?

Embracing translanguaging improves the implementation of bi/multilingualism in Deaf education by empowering the learner and the teacher to work through the challenge of language deprivation. The teacher and the learner engage in a dynamic and functionally

integrated use of different languages and language varieties to make meaning, enhance the learning experience, and develop the learners' identity beyond the focus of the language(s) (Garcia and Wei 2014; Wei 2018). Generally, the concept of translanguaging is new in teacher education and focuses on learners who have a language delay or second language/English language learners (Kleyn 2016; Koulidobrova and Pichler 2021; Musanti and Rodríguez 2017; Tian 2020). In Deaf education, language competence, language deprivation, and multilingualism present a unique challenge for teachers (Kuntze 1998; Hall et al. 2017; Humphries et al. 2012; Swanwick 2017). Deaf education teacher preparation programs in the US—like many other US teacher education programs (i.e., general education, special education, and specialized programs)—have adopted assimilationist ideologies and subtractive approaches to bilingualism. Schools and teacher education programs recognize and prepare teachers who consider English and ASL as the academic languages, or medium, for instruction (Nover et al. 1998). Teacher preparation programs that adopt an ASL/English bilingual framework aim to prepare teachers with a specific skillset, language, and literacy to be able to teach content in two languages. By focusing on two dominant languages (ASL and English), the programs inculcate the expectation that multilingual students would discard their languages (spoken and sign) and use only English and ASL, the main languages used by Deaf bilinguals in the US.

To attend to all DHH students in the classrooms, Deaf educators need to develop translanguaging knowledge, dispositions, and skills before graduating. They need to see bilingualism as an asset and leverage students' entire cultural and linguistic repertoires during instruction. Hence, in this article, the author first reviews the literature on what is known about Deaf learners, language, and translanguaging. The author notes that Deaf learners are an heterogeneous group, and that the language interplay involves various spoken and sign languages. The author follows with a larger picture of the history and state of deaf education in the US, presenting the context in which Deaf learners and teachers would engage in translanguaging. Next, the author views translanguaging as a theory and practice that teachers of Deaf learners can use to include all linguistic repertoires of Deaf learners and attend to their language needs, including language deprivation. Additionally, the author examines theoretical framework that teacher education can adopt to support teachers in developing the knowledge, skills, and disposition needed in implementing translanguaging with Deaf learners. The author concludes with a proposed translanguaging pedagogy in Deaf education teacher preparation.

2. Deaf learners' Language and Translanguaging

Language is a complex aspect among DHH learners. Most Deaf children experience challenges with language acquisition; a high percentage of them (90–95%) are born to hearing parents (Kuntze et al. 2016; Lederberg et al. 2013; Mitchell and Karchmer 2004). Hence, Deaf children do not gain access to language at the same age or time in their development due to the varied access to comprehensible language input. Non-signing hearing parents are provided various options on how to proceed in supporting their Deaf children's language development (Meadow-Orlans et al. 2003; Mitchell and Karchmer 2005).

Parents make the language choices for their Deaf children, choosing between spoken language or sign language (Decker et al. 2012; Guiberson 2013; Lillo-Martin et al. 2016; Meadow-Orlans et al. 2003; Mitchell and Karchmer 2005). Most hearing parents tend to choose the majority spoken language or the spoken language used at the home (Humphries et al. 2012). Previous research shows various factors influence Deaf learners' language, including parental hearing status and knowledge of ASL (Calderon 2000), race (Gallaudet Research Institute 2008), and socioeconomic status (Pungello et al. 2009). Consequently, while Deaf children with Deaf signing parents access language from birth (Emmorey 2002; Meier 2016; Mitchell and Karchmer 2004, 2005; Morford and Mayberry 2000), some Deaf children with hearing parents are not exposed to a language that is fully accessible to them until well after birth, or even much later in childhood or adolescence (Johnson et al. 1989; Lederberg and Spencer 2001; Mitchell and Karchmer 2004).

Additionally, with the United States' population fast becoming more diverse linguistically and culturally due to immigration, schools are experiencing an increasing number of Deaf learners with limited to no language skills in either English or ASL (de García 1995; Howerton-Fox and Falk 2019; Pizzo 2016). Like D/HH in the US who use home signs (Erting 2003; Henner and Robinson 2021; Kuntze et al. 2016), some immigrant multilingual Deaf learners (IMDLs) use home signs or possess limited skills in both spoken and sign languages from their native countries. These immigrant Deaf learners in the US must learn two new languages, ASL and English (Musyoka and Adeoye 2020). The parents of some IMDLs only know and use languages other than English (LOTE) at home, which makes it more challenging for IMDLs to access and practice the English language at home. The most spoken languages among immigrant families are Spanish, Chinese, Hindi and related languages, Filipino/Tagalog, French, Vietnamese, Dravidian, and other unidentified languages (Pew Research Center 2019). The topmost spoken African languages that comprise 39% of the languages labeled "unidentified languages" include Swahili, Yoruba, Igbo, Twi, Amharic, Somali, and Kru (Chronicle 2019; The US Department of Commerce Bureau of Census 2015).

With all the linguistic diversity and language access issues that Deaf learners experience, they also demonstrate various multimodal linguistic repertoires (Iturriaga and Young 2021). Some Deaf children demonstrate English only while others use ASL or both. In addition, some Deaf learners use homesign to communicate (Goldin-Meadow 2020; Henner and Robinson 2021) while others use non-linguistic means during social interactions (Yoshinaga-Itano et al. 1992). Additionally, some D/HH learners use manually coded English, cued speech, lip-reading, simultaneous communication systems, or total communication philosophy as their sole linguistic input (Rendel et al. 2018). In the case of IMDLs, they use languages not known by their teachers or their peers (Iturriaga and Young 2021; Musyoka 2022). Hence, the goal of this research is to understand how Deaf learners' linguistic repertoires can enhance bilingual Deaf education teacher preparation.

Deaf learners' linguistic repertoires involve the use of sign, spoken, and written language; hence, the learners can be monolingual/bilingual/multilingual and unimodal/bimodal, depending on their language background experience (De Meulder et al. 2019; Lindahl 2015). Additionally, because of various factors (e.g., diverse access to comprehensible language input, quantity of language accessed, nature of language, age of exposure, and cultural and national backgrounds), Deaf learners are also linguistic heterogeneous when regarding their competency in the linguistic repertoires. For an IMDL, the teacher and classmates may not know the IMDL's linguistic repertoires; at the same time, the IMDL may not know or may have limited competence in the linguistic repertoires used by the teachers and peers. In implementing translanguaging, the teacher can model and support the IMDL in using the linguistic repertoires by encouraging the use of native sign language, words, or homesigns when learning content vocabulary. Allowing Deaf students to use all their linguistic repertoires supports the Jacobson (1990) language allocation approach, called the New Concurrent Language Approach. The New Concurrent Language Approach supports classroom allocation of multiple languages and language mixing as a part of a language advantage to bilingual learners.

In addition, translanguaging among most Deaf learners is across two modalities in which Deaf learners present content in both written text and sign language using their linguistic repertoire of skills—i.e., writing, reading, comprehension, and use of sign language (Iturriaga and Young 2021; Lindahl 2015; Swanwick 2017). For example, with writing, Deaf learners produce written English, scripts, English gloss scripts, or use SignWriting. Educators of Deaf students are reported to implement translanguaging through creative uses of sign, spoken, and written languages, such as chaining and sandwich strategies for new vocabularies (Humphries and MacDougall 2000). However, although translanguaging is becoming more widespread in Deaf education, there are concerns on how its implementation can emphasize the dominant language, such as English, through strategies that combine sign and spoken language using, for example, manual English systems and

simultaneous communication (Iturriaga and Young 2021; Snoddon 2017). Additionally, some teachers in Deaf education seem to assume translanguaging and Sign Supported Speech are the same (Swanwick 2017). Hence, Deaf education teacher preparation has a responsibility to train teachers of the Deaf in providing translanguaging knowledge skills and disposition. This training would ensure that children who start school with language delay, language deprivation, and limited competence in the majority language (in the case of IMDL) benefit from the therapeutic experience of translanguaging.

3. Deaf Education and Deaf Teacher Education in the USA

Historically and even today, language continues to be a critical factor in Deaf education. Hence, when examining translanguaging in teacher education, it is crucial to explore the state of deaf education because it reflects the teacher preparation programs. The use of sign language in Deaf education in America goes back to 1817 when the first school Connecticut School for the Deaf and Dumb (now known as the American School for the Deaf in West Hartford, Connecticut) was started by Thomas Gallaudet and Laurent Clerc. After establishing ASD, other states began schools for the Deaf in New York, Pennsylvania, Kentucky, Ohio, Virginia, and Indiana (Van Cleve and Crouch 1989). As the support for sign language spread in the USA in 1841, Horace Mann visited Germany and returned influenced by the oral methods used in Germany. He wrote a report in 1843 that challenged the use of sign language in educating Deaf children and advocated for oral methods, which led to the establishment of the oral school in 1867 (Van Cleve and Crouch 1989). Hence, until the 1860s, sign language was the primary method used to educate deaf people (Jankowski 2013).

Then the Milan 1880 conference made a turning point in Deaf education by advocating oral education and banning sign language in schools (Hill 2012; Horejes 2012; Van Cleve and Crouch 1989). By 1890, Deaf education subscribed to one of three teaching methods: oralism, sign language, or a combined method. Only a few schools focused on the use of sign language. In 1960, Stokoe identified ASL as a language (Armstrong and Karchmer 2009; Charrow and Wilbur 1989), but the manual/oral debate in deaf education continued with an attack on how sign language could be a language used in school. The anti-ASL gave birth to signing systems such as Seeing Essential English (SEE-I), Signing Exact English (SEE-II), Linguistics of Visible English (LOVE), Signed English, and Ameslis (Wilbur 1979). Besides the manual English signing systems, other forms of communication, such as the Rochester method, cued speech, total communication, and simultaneous communication. Total Communication (TC) is a philosophy that incorporates all means of communication, including sign language, fingerspelling, natural gestures, pantomime, drawing, writing, and oral language, to ensure effective communication with learners who are D/HH (Bahan 1989). Sometimes, TC is replaced by simultaneous communication (SimCom), depending on how it is applied. SimCom involves simultaneous speech and a sign system, mostly signed English (Hyde and Power 1992).

While deaf educators explored various ways to meet the deaf learners' language and communication needs, only a few schools for the Deaf implement some form of bilingual education (Johnson et al. 1989). Most schools use the term comprehensive communication or TC. Advocates of TC argued that offering different communication means gives deaf children the opportunity to choose and use different forms of communication that meet their communication needs (Evans 1982; Pahz et al. 1978). Additionally, although most advocates of TC support the use of sign language and speech, the goal is to develop oral language (Evans 1982; Pahz et al. 1978).

The 1970s was not only a period of manual English systems and communication systems and philosophies, but the idea of bilingual-bicultural in Deaf education (Erting 1978; Kannapell 1974; Stokoe 1975). However, from its earliest conception, the idea of ASL/English bilingualism met resistance because most people saw ASL as a communication tool in the total communication philosophy (Erting 1978), hence the slow growth of bilingual schools, with only nine schools in 1995 (Strong 1995), fifteen schools in 1998 (Nover and Andrews 1998), and nineteen schools in 2003 (LaSasso and Lollis 2003). The fight against

anti-bilingualism in Deaf education was noted in 2008 by the National Association of the Deaf (NAD) position statement, which reaffirmed its position concerning early access to ASL for Deaf children as a human right ([NAD 2008](#)). Also, in 2010, the International Council on the Education of the Deaf rejected all its resolutions passed at the ICED congress in 1880, which refused to recognize sign language in education ([ICED 2010](#)).

The anti-bilingualism and use of sign language in the education of Deaf learners reflects the teacher training programs in the US. Deaf teacher education programs offer various communication methods ([Deaf ed.net 2022](#); [Johnson 2004](#); [Jones and Ewing 2002](#)). According to [Jones and Ewing's \(2002\)](#) survey of Deaf education programs conducted in 2002 of 46 teacher preparation programs, thirty-nine offered comprehensive teacher preparation, five offered auditory/oral, and two offered preparations in bilingual-bicultural education. In 2016, Cannon and Luckner identified 64 deaf education teacher preparation programs, of which only eight focused on ASL/English bilingual education. Currently, the Deafed.net website, which provides information on the professionals who serve Deaf and hard-of-hearing students, indicates that of the 51 teacher preparation programs, only 11 identified themselves as ASL/English bilingual programs.

Besides the few ASL-English bilingual programs, the total number of all teacher preparation programs is declining ([Johnson 2013](#)). A literature review shows that in 1986, there were 83 Deaf education teacher preparation programs ([Dolman 2010](#)). The number declined in 2007 to 68 programs and 2008 to 60 ([Benedict et al. 2011](#)). Additionally, in 2004, 13 US states did not have a Deaf education teacher preparation program ([Johnson 2004](#)). Today, 21 states have no Deaf education teacher preparation program. Hence, as the field of Deaf education enters a new phase in which there is an increase in multilingual deaf students, there is a need for teacher preparation programs not only to strengthen the existing programs to become more visual but also to revisit their curriculum to attend to the issue of language and not just communication. Consequently, with the compounding continuing issues of language in Deaf education, a translanguaging pedagogy in Deaf education is necessary.

4. Translanguaging: A Theory and a Practice

The term *translanguaging* was coined from a Welsh word, *trawsieithu*, by Welsh educator Cen [Williams \(1996\)](#). The term represents a planned, teacher-initiated, and bilingual strategy of purposefully using two languages (Welsh and English) concurrently within a lesson or task ([Baker 2006](#)). Williams found that the students' language choice was not rigid but varied depending on the task. William observed the language input used by the teacher in instructing or asking questions in class was different from the language output used by the students interacting with the teacher in the class during the instruction ([Poza 2017](#)). For instance, the pupils would read something in Welsh and the teacher discuss in English, while in other times the teacher could be teaching in Welsh and the students would respond in English. Hence, the learners bilingual Welsh identity required Welsh and English be used for social and academic purposes.

The idea of translanguaging has changed in more recent work, focusing on bilingual and multilingual students. According to [García \(2009\)](#), translanguaging involves more than how two or more languages are used together. Echoing [García \(2009\)](#), [Otheguy et al. \(2015\)](#) agreed that translanguaging did not include the idea of bilinguals using two distinct languages separately and together as in code switching. Additionally, [Garcia and Wei \(2014\)](#) noted that, when translanguaging, bilingual learners do not mix separate named languages but select languages from their linguistic repertoire to support their communicative needs while maintaining their linguistic and cultural identities. These researchers also noted that the term *translanguaging* cannot be limited to one bilingual instructional strategy. Instead, it is a broad, fluid, bilingual practice in which teachers and students engage in all the linguistic repertoires in the learning context for both academic and nonacademic purposes, as needed by various bilingual students.

Linguistic repertoire, the key term in translanguaging, was defined by Hall (2019) to mean “to refer to the totality of an individual’s language knowledge” because it gives flexibility and does not imply the binary idea of being competent or not (p. 86). Adopting the idea of linguistic repertoire in translanguaging can support bilingual students in understanding and developing content-based vocabulary and simultaneously in engaging in identity-related tasks with their peers and becoming active members of the class despite the language difference (Creese and Blackledge 2010). Moreover, adopting the idea of linguistic repertoire with translanguaging shifts students’ assessment from focusing on tasks in one language, or two separate languages, to assessing the learner’s ability to use their linguistic repertoire in various ways when performing the task (Poza 2017). Hence, the accommodation of students’ repertoire changes translanguaging from being a theory to a practice that allows their shared identity and solidarity, thereby improving their engagement, increasing inclusion, and impacting their access to and understanding of curriculum content.

Consequently, seeing translanguaging as a practice, Garcia and colleagues (2016) defined a translanguaging classroom as “any classroom in which students may deploy their full linguistic repertoires, and not just the particular language(s) that are officially used for instructional purposes in that space” (p. 2). The idea of connecting/interconnecting learners’ linguistic repertoires opposes the monolingual perspective that languages are compartmentalized independently—a view that has traditionally dominated applied linguistics. Garcia and colleagues (2017) argued that translanguaging supports Ruiz’s (1984) language-as-resource perspective, which cannot be implemented when there is a strict separation of languages and the teacher insists on using a target language, disregarding students’ languages.

5. Translanguaging Pedagogy

Most teachers are monolingual and, hence, are not expected to know all the languages of their students (Ponzio 2020). However, translanguaging pedagogy does not focus on the number of languages in the classroom or the teachers’ knowledge of the languages. Instead, it focuses on what language-minoritized learners do with their languages—i.e., how they fluidly navigate across languages, making the boundaries between the languages more diffused in their attempt to construct an integrated meaning-making system. By centering on the fluid and dynamic language practices of language-minoritized learners, translanguaging pedagogy confronts subtractive and negative language ideologies, which emphasize a monolingual approach in education and marginalize students who do not fit what is considered the norm (García 2019, 2012; Garcia et al. 2016; Otheguy et al. 2015, 2019). In addition, translanguaging confronts an ideology of isolation and language separation to protect the minority language (Wei 2018).

Translanguaging practice involves two types of pedagogies that are in a continuum: pedagogical translanguaging and spontaneous translanguaging (Cenoz and Gorter 2020, 2022). Pedagogical translanguaging, also known as designed translanguaging or intentional translanguaging, is a form of translanguaging in which the teacher is conscious of and plans the translanguaging practices with a pedagogical purpose (Cenoz and Gorter 2020, 2022; Leonet et al. 2017; Vaish and Lin 2020). Because pedagogical translanguaging is planned or facilitated by teachers, teacher preparation programs need to train teachers who learn about their students’ multilingual linguistic features to develop learning materials and scaffolding for students to use all their linguistic repertoires in learning (Daniel et al. 2019; Vaish and Lin 2020). On the other hand, spontaneous translanguaging is unplanned, sporadic, non-purposeful, non-creative, not necessarily assisted by language learning, and can occur both at school and outside school (Cenoz and Gorter 2020, 2022; Creese and Blackledge 2010; Leonet et al. 2017; Vaish and Lin 2020). Cenoz and Gorter (2017) defined spontaneous translanguaging as “the reality of bi/multilingual usage in naturally occurring contexts where boundaries between languages are fluid and constantly shifting” (p. 904). Although it is not planned, spontaneous pedagogy can be used to pedagogically develop students’ awareness about the way languages are used in natural communication.

There are three core components of translanguaging pedagogy, including *translanguaging stance*, *translanguaging design*, and *translanguaging strategies* (Garcia et al. 2016). *Translanguaging stance* focuses on how to support teachers in viewing students' whole linguistic repertoire as a resource (Garcia et al. 2016) identified two types of translanguaging stances: scaffolding and transformative. Teachers who hold a scaffolding stance believe that the inclusion of the learner's full language repertoire is only temporary to be used to scaffold the learners toward the new target language (Daniel et al. 2019; Garcia and Kleyn 2016). On the other hand, teachers who hold a transformative stance believe that using the child's full repertoire will transform the language philosophies in schools, thereby confronting negative ideologies of monolingualism (Garcia and Kleyn 2016; Hurst and Mona 2017). Translingual dispositions support teacher candidates in identifying their translanguaging stance. The candidates examine how they consciously or unconsciously refuse to recognize and include their students' non-dominant language practices and adopt positive supportive conceptions of languaging and language education.

For *translanguaging design*, the second component of translanguaging pedagogy, the teachers are intentional in their choice of instructional strategies that not only integrate two or more languages but also develop the students' multilingual repertoire and metalinguistic and language awareness (Cenoz and Gorter 2020). According to Cenoz and Gorter (2020), this intentional strategy encourages interlingual and intercultural communication, such as translation and interpreting, which are needed because students' diverse language practices inform the instruction and assessment—hence, the need to integrate home and school language and cultural practices.

For teacher candidates to master translanguaging design, educators must model or use pre-recorded video lessons on planning for translanguaging space and provide them with opportunities to plan and implement their plan. With translanguaging design, teachers need support in designing translanguaging instructional plans that involve multilingual language objectives and collaborative/cooperative structures in which students can use their full language repertoire with teachers and peers (Tian 2020). As the teacher educators model plan design and implementation, teacher candidates can develop mock-teaching lessons. However, mock teaching provides only the first step for the teacher candidates in planning for translanguaging. Including translanguaging theory and practice in their clinical teaching and student teaching allows them to be mentored in the field on using translanguaging with real learners with various linguistic repertoires. Hence, Tian (2020) recommends translanguaging practices in clinical teaching or practicum so that the teacher candidates can plan, evaluate their plans as they implement, and try out various strategies with the bi/multilingual learners.

Translanguaging strategies are the third component of translanguaging pedagogy. Bi/multilingual educators have identified various translanguaging pedagogical practices for which teacher candidates need training (Allman and Guethler 2021; Canagarajah 2011a; Cenoz and Gorter 2020; Creese et al. 2018; Garcia et al. 2016; Garcia and Kleyn 2016; Garcia and Wei 2014; Hesson et al. 2014; Ke and Lin 2017; Musanti and Rodríguez 2017). Common translanguaging strategies identified in the reviewed literature included:

1. Preview-View-Review;
2. Language translation and interpreting strategies;
3. Language experience approach;
4. Translanguaging with writing and reading (independently and shared);
5. Use of language centers/tables with different languages resources;
6. Use of anchor charts, cognate charts, multilingual walls;
7. Collaborative and group activities that encourage multilingual collaboration and
8. Making cross-cultural connections;
9. Reading in own language;
10. Translanguaged assignments and assessments;
11. Translanguaging shifts during the process of teaching; and

12. Strategies using technology, such as the Google Classroom Tool Library and the one-note classroom, allowing students and teachers to access and share content in multiple languages.

During their training, as the teachers learn how to implement the various translanguaging strategies, they can identify, collect, and learn how to use multiple multilingual and multimodal instructional resources—e.g., printed multilingual texts, videos, movies, dictionaries, internet resources, and multilingual resource persons, such as the learners' families and community members. The learners, learners' families, and community share funds of knowledge to support the translanguaging practice. Additionally, translator websites, although not perfect, can be used to provide the multilingual students and teachers with a rough translation to facilitate discourse. Having translanguaging pedagogy presented during teacher training enables the candidates to become aware of their own language ideologies, acknowledge and include their learners' cultural and linguistic diversity, and value translanguaging as a therapeutic tool for fostering multilingualism in the classroom.

6. Guiding Frameworks for Translanguaging Pedagogy in Deaf Teacher Preparation

In discussing translanguaging in Deaf education teacher preparation programs, this paper adopted two frameworks: Crip linguistics ([Henner and Robinson 2021](#)) and the continua model of biliteracy ([Hornberger 1989, 1990, 2003](#)).

6.1. Crip Linguistics

Proposed by [Henner and Robinson \(2021\)](#), Crip linguistics can be used to understand how critical it is for educators to understand and implement translanguaging with Deaf learners. In the framework, the term *Crip* refers to the act of disrupting the stable, transforming the familiar, subverting the order of things, unsettling entrenched beliefs, and making anew ([Henner and Robinson 2021](#)).

The Crip linguistics framework argues three perspectives regarding language:

1. Analyzing human languaging is necessary, lest we reproduce inequities.
2. Recognizing that languaging is multimodal.
3. Embracing disabled ways of being in producing language: sensory orientations, interdependence, mutual-aid, and world-building, care work, and the ways that time interacts with the body, mind, and language.

The importance of aligning translanguaging work with the Crip framework in Deaf education teacher preparation is that most kindergartens to 12th (K-12) teachers of the Deaf adopt ableist beliefs that support monolingual and monomodal educational language, which continue language deprivation for Deaf children. K-12 represents the primary and secondary (high) schools. On the other hand, many Deaf children raised by hearing non-signing parents, including immigrant multilingual Deaf children who arrive in school using home signs or other unknown sign languages, tend to be labeled as having no language or language disordered. According to Crip linguistics, language can be impaired but should *not be labeled as* a bad language or non-language ([Henner and Robinson 2021](#)). Hence, Deaf students who arrive at school using home signs should not be considered as language disordered because their comprehensible language input is visual and multimodal. They develop homesign because they need sign language, but their need for a visual language was impaired by the auditorily based home environment ([Henner and Robinson 2021](#)). Additionally, the Crip linguistics lens can be used to understand the language experiences of IMDLs whose language is outside of what the educators perceive as normal ([Henner and Robinson 2021](#)). By adopting a Crip linguistics lens, IMDLs do not need to be “fixed”, normalized or assimilated into the host sign language.

With translanguaging, teachers who adhere to Crip linguistics were once trained to see the influence of the home language on students' learning as a deficit must learn to use the home language as a support for students to organize their language learning and literacy development. Although homesigns are not considered language, research has shown that Deaf native users of American Sign Language, who had no previous experience with a

certain homesign system, can understand the homesign system better than the hearing homesign users (Goldin-Meadow 2020). Additionally, Goldin-Meadow (2020) argued that Deaf native users' comprehension of new homesigns indicated elements of linguistic structures noticeable by Deaf and not hearing. Hence, Deaf educators who are proficient in ASL need to pay more attention to new Deaf students in school instead of ignoring them and dismissing their language.

6.2. Continua of Biliteracy

The second framework that would guide translanguaging is Hornberger's continua of biliteracy, which offers guidelines on research, teaching, and language planning in linguistically diverse classrooms where learners' linguistic repertoires can be identified and included (Hornberger 1989, 1990, 2003). Hornberger (1990) defined biliteracy as "any and all instances in which communication occurs in two (or more) languages in or around writing" (p. 213). The framework has four components which occur in a continuum: context, media, content, and development of biliteracy. Understanding the continuum for each component is important in translanguaging because various learners' linguistic repertoires are accommodated in the continuum. Teachers in Deaf education need to understand how the continua of biliteracy apply to their students because it recognizes and builds on the language and literacy repertoires that students bring to school.

Context, the first component, suggests that learning contexts can impact translanguaging represented in the classroom. Because the language continuum for Deaf learners ranges from oral/sign to written, bi/multilingual to monolingual, and micro to macro, how language is used in the classroom is not limited to reading and writing. Instead, language use can include students' linguistic repertoires that may include oral or sign language. Teacher preparation programs in Deaf education would need to train their teacher candidates in not only the majority language—which could be English or English and ASL—but also other languages represented in the classroom. For effective implementation of translanguaging for biliteracy in any context, teacher candidates need to be aware of how language planning is both a micro issue in their classroom and a macro issue as school administration and states adopt language policy that might affect learners' Individualized Education Program (IEP).

The next component, the media of biliteracy, occurs in a continuum that ranges from simultaneous exposure to successive exposure, dissimilar structures to similar structures, and from divergent scripts to convergent scripts. According to Hornberger and Link (2012), the media of biliteracy focuses on the media of instruction and learners' communicative and linguistic repertoires and how they are acquired and used. Deaf children's language and communication competence is highly influenced by their social and cultural background characteristics—e.g., age, use of a cochlear implant, the deafness of one or both parents, and regular use of sign language in the home (Allen and Anderson 2010). Due to these factors, most Deaf children arrive in school with limited or low language and communication competencies (Erting 2003; Johnson et al. 1989; Kuntze 1998). The language exposure of some Deaf learners is limited to homesigns (Goldin-Meadow 2020; Henner and Robinson 2021). Additionally, although most IMDLs experience the same language and communication as the native Deaf, they come from families where English is not the home language and from parents who have limited English proficiency skills (Cannon and Luckner 2016; Musyoka and Adeoye 2020). In addition, IMDLs experience challenges of knowing languages (sign languages and spoken languages) with which their teachers and peers may be unfamiliar (Musyoka 2022). Consequently, with biliteracy and translanguaging, teachers of the Deaf will need knowledge and skills on how to include the Deaf students' different languages and modalities—e.g., spoken and sign languages, writing systems (logographic, syllabic, alphabetic, and featural). In addition, they will need strategies for supporting simultaneous or successive languages considered media of instruction without ignoring the funds of knowledge students bring into the classroom. Hence, as Hornberger and Link (2012)

suggested, the media of instruction should include various language structures, scripts, and sequencing of the languages, literacies, digital, and other communicative resources.

The third component, focusing on the content, occurs in a continuum that ranges from minority to majority, use of vernacular to literary, and presentation that ranges from contextualized to decontextualized language and literacy. Deaf students are considered a linguistic and cultural minority ([Higgins and Lieberman 2016](#)). Furthermore, the heterogeneity of Deaf students includes IMDLs who also are considered a linguistically and culturally minority because their languages and cultures are minority in the host country and within the host country's Deaf community. Translanguaging in Deaf education teacher preparation requires teacher candidates to be equipped on how to include perspectives and experiences that occur with not only the majority hearing community but also the minority Deaf community. In doing so, teachers of Deaf students need skills in different teaching strategies and genres that range from literary to vernacular, including the use of sign language. In terms of content, the selected learning resources, whether in print or video format, will need to present both decontextualized-to-contextualized language and literacy that is representative of the Deaf students.

The last component, the development of biliteracy and its assessment, is also in a continuum that ranges from reception to production, oral/sign to written, and development and transfer from first to second language. Language is critical in biliteracy development, and most Deaf children experience language delay or incomplete proficiency of a first language due to limited or no access to comprehensible language input. Consequently, some Deaf children experience language deprivation ([Hall et al. 2017](#); [Humphries et al. 2012](#)). According to [Humphries et al. \(2012\)](#), linguistic deprivation does not harm the Deaf child's language but constitutes multi-faceted damage to the child's cognitive and psychosocial development, which impact language and literacy development.

Although translanguaging allows linguistic repertoires, in the deaf community, "language deprivation" is an accurate term for describing deaf communities, and it can sometimes coexist with a "linguistic repertoire." How does this happen? Implementing linguistic repertoires depends on language planning, including status, corpus, and acquisition planning ([Cooper 1989](#)). According to [Cooper \(1989\)](#), language planning is a deliberate effort to influence the behavior of others concerning the acquisition, structure, or functional allocation of their language codes. Taking into cognizance the diversity of Deaf learners that symbolize the deaf community, a language planning that supports linguistic repertoire like in spoken language can take a political and decolonizing stance that challenges the power of a language over others and the naming of some languages as academic and others as not ([García 2019](#); [Wei 2022](#)). [Wei \(2022\)](#) noted that in a learning environment where linguistic repertoire is a welcomed idea, "the various languages are associated with the users who may belong to different nation-states, come from a variety of backgrounds, and be in very different social positions" (p. 173).

In the deaf community, sign language users vary in the same aspects, in addition to being labeled as a disabled or linguistic minority and their sign language as a communication tool. Consequently, it impacts sign language's power and status in a translanguaging environment. In addition, with the diversity in the Deaf community, sometimes there is a presumption that all sign language choices are equally available to all Deaf people. Doing so overlooks various issues such as racial-linguistic separatism, unequal "capital," family background, personal dispositions, acquisition level, language ideologies, political oppression, and the status of the sign language (national versus "village" or regional sign language) ([Burke et al. 2016](#); [De Meulder et al. 2019](#)). Hence, the issue of language deprivation and linguistic repertoire demands social justice and intentionality for a translanguaging stance that allows translanguaging to become therapeutic. The language stance must focus on all Deaf learners and recognize the differences in their language codes' acquisition, structure, or functional allocation. Hence, Deaf education teacher preparation programs need to train teachers who adopt a translanguaging stance and use translanguaging practices to support Deaf learners in developing their linguistic repertoires in not only L1 and L2 but

in other languages, because the L1 and L2 of some IMDLs may not be their school languages. Additionally, because of language delays and language deprivation, Deaf students' competencies in receptive, productive, oral/sign, and written language skills across their language and literacy repertoires may be lacking. Involving translanguaging in assessment is then key in understanding Deaf students' language and literacy competencies to know where and how to start the process of biliteracy development and make the therapeutic experience effective.

7. Translanguaging Pedagogy in Deaf Education Teacher Preparation

An increasing population in the US speaks two or more languages, which means that both schools for the Deaf and mainstream schools have Deaf students who are bilingual/multilingual. According to [Grosjean \(2010\)](#), "equal and perfect knowledge" of two languages is a myth (p. 20). Hence, Deaf students are expected to hold various linguistic repertoires that are part of their translanguaging practice. Having knowledge about translanguaging is not enough. Teachers of Deaf students need opportunities to develop attitudes, values, beliefs, commitments, and ethics that influence their behaviors toward various linguistic repertoires and also experiment with translanguaging in practice. Translanguaging pedagogy in Deaf education teacher preparation programs can be developed into a standalone course or be infused across all the courses.

Translanguaging as pedagogy means that the teacher understands that the linguistic capabilities of the students go much further than the classroom language practices ([Creese and Blackledge 2010](#)). Through translanguaging pedagogy, the Deaf education teacher is supported in acknowledging and tapping into Deaf students' languages, knowledge base, and capabilities as a resource—including their home language practices—to further learning. Translanguaging pedagogy dismisses the quick judgment of Deaf students' having no language and possessing a tabula rasa mind onto which teachers write appropriate language and literacy skills. Moreso, in connection to IMDLs, translanguaging pedagogy prompts the teacher to adopt a therapeutic stance in which the teacher knows that IMDLs may have language and can perform such literacy skills as read, write, count, add, and subtract in their language. Hence, the teacher has a role to model and scaffold the Deaf students toward using all their linguistic repertoires to demonstrate their funds of knowledge. With translanguaging pedagogy, teachers can use the content knowledge in students' first language/s to develop a bridge to the target language and support students in expressing what they know in both their first language and target language ([Wei 2018](#)).

7.1. The Building Blocks of Translanguaging Pedagogy in Deaf Teacher Education

The Building Blocks of translanguaging pedagogy in Deaf teacher education comprise a three-level pyramid framework, with the base of the pyramid focusing on the theoretical lens that builds the translanguaging stance, which supports teachers in developing translanguaging dispositions. See Figure 1.

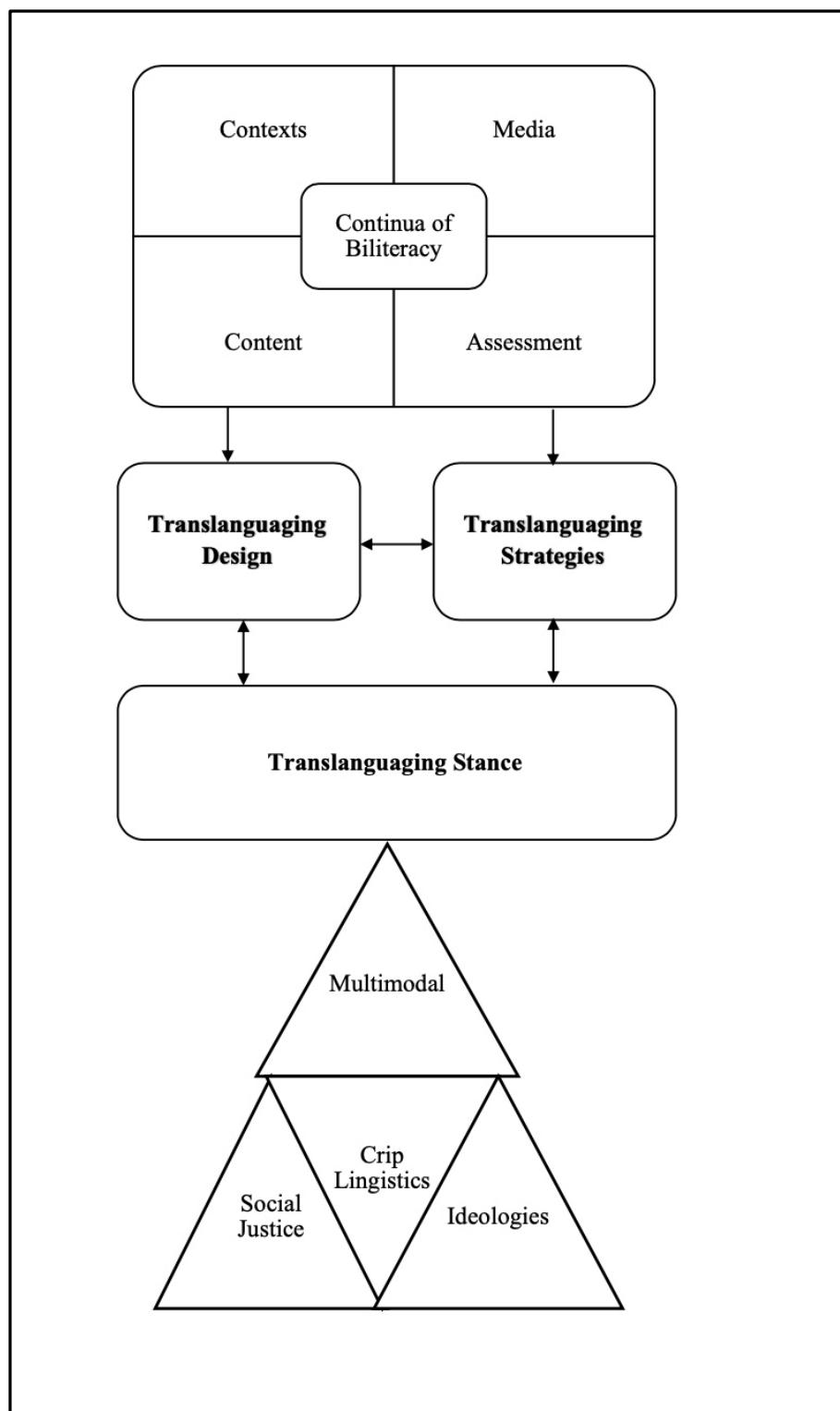


Figure 1. The Building Blocks of translanguaging pedagogy in Deaf teacher education.

At the base of the pyramid is the theory—Crip linguistics, which is a lens that attends to ableist and discriminatory ideologies on language, beliefs on home signs, and implications of marginalizing communicative practices. The base has three foundational blocks: ideologies, social justice, and multimodal. Language ideologies exist and influence Deaf educators in nuanced, often subconscious ways in the translanguaging stance they adopt. Teachers' language ideologies are either a scaffolding or transformative trance regarding

sign language, home signs, and other linguistic repertoires in the classroom. A stance impacts how teachers plan and use the multimodal language model, which includes all the linguistic repertoire in the classroom. The multimodal language model is an avenue to increase linguistic diversity and ensure that educators avoid language rights violations and language inequities leading to *inclusive* language practices that promote social justice. Consequently, the base draws from the Crip linguistics lens, which ensures deaf children do not experience language deprivation while attending a program that claims to implement translanguaging pedagogy.

The middle of the triangle represents the three translanguaging components (translanguaging pedagogy (Translanguaging stance, translanguaging design, and translanguaging strategies) and how they depend on each other. The top part of the pyramid is the four foundational blocks of the continua of biliteracy: context, media, content, and assessment. The four blocks attend to language planning and language policy and the instructional strategies that support the inclusion of various linguistic repertoires in the classroom. The operations of the four blocks depend on the translanguaging stance developed by the teachers. Hence, the connection between the Crip linguistics lens and the continua of the biliteracy framework because Crip linguistics is a foundation on which educators of the deaf can examine and reflect on their translanguaging stance, develop translanguaging design and implement translanguaging strategies.

The model offers a bridge between theory, research, and educational practice. It intends to help educators increase their understanding of translanguaging in Deaf education by examining and transforming their language ideologies, language planning, and language practices. The reason for the model is to respond to multilingual Deaf students' struggles in learning and, more importantly, how educators support these students. Translanguaging is a complex process, and several factors may influence how each teacher preparation program would present the model to their candidates. In addition, the blocks in the model are not discrete units but contain interrelated, overlapping knowledge skills and dispositions that may not fit neatly into one block. The following discussion on the three critical components of translanguaging pedagogy will enable the reader to understand how teacher education can reframe their preparation program and organize these key blocks to equip their deaf education teacher candidates effectively.

7.2. Translanguaging Stance

Most teachers of Deaf students are monolingual English speakers. To connect with Deaf students, including those from different cultural and language backgrounds, they need to understand their own identities by analyzing and reflecting on their language ideologies. Hence, the first step in adopting translanguaging pedagogy in teacher education preparation programs is including translingual dispositions to prepare teachers to oppose subtractive language ideologies and implement translanguaging pedagogy in their classrooms ([Canagarajah 2011b](#); [Ponzie 2020](#)). The goal of translingual dispositions is to support teacher candidates in first examining their language orientations and attitudes as teachers of D/HH students. The second goal is to examine the language ideologies held by other professionals that could impact the implementation of the translanguaging process ([Ponzie 2020](#)).

When joining a Deaf education teacher preparation program, some teacher candidates do not know whether their translanguaging stance is scaffolding or transformative. Therefore, Deaf education teacher preparation programs need to support teacher candidates in identifying and developing a translanguaging stance. The programs' use of translingual dispositions would guide the candidates through rejecting linguistic agendas—propagated by assimilationist ideologies—and positioning themselves as collaborators who advocate for how meanings can be constructed across language differences ([Ponzie 2020](#)). Through translingual dispositions, teacher candidates examine themselves and identify their negative assumptions about minority languages—spoken and sign languages—which are based on deficit theories viewing students from non-dominant groups as inferior and bringing

little of value to their education. Teacher candidates need to examine themselves and the shift from the traditional role of the language teacher providing linguistic knowledge and skills to Deaf learners to that of building learners' self-learning capacity, learner agency, and language identities (Burton and Rajendram 2019; Ke and Lin 2017; Tian 2020). The shift is possible when teacher candidates adopt a critical reflexive stance (Ponzi 2020; Tian 2020). In Deaf education, the critical reflexive stance involves teacher candidates examining their language philosophies. How do the philosophies attend to the power of monolingualism (English) or bilingualism (ASL and English) and the language power they have in their classrooms as teachers? According to Tian (2020), a critical reflexive stance enables teachers not to focus on themselves as language incompetent or non-native speakers of the students' languages but to view themselves as co-learners and students as a resource. The process can be challenging for teacher candidates who feel uncomfortable relinquishing the power of the dominant language and their role in the classroom. In addition, some may feel uncomfortable sharing their power with students and their families as they embrace cultural and linguistic diversity in their classrooms to create a translanguaging space. Based on Crip linguistics and Hornberger's framework, teacher candidates will need to develop a transformative stance that rejects the assumption that Deaf students who use homesigns and IMDLs who use minority languages (spoken and sign languages) should not be encouraged to use all their linguistic repertoires because they do not contribute to the learning process. Taking a transformative stance becomes a therapeutic tool for supporting all Deaf learners in bringing their language funds of knowledge to learn new languages and content. Supporting Deaf learners in incorporating the entire linguistic repertoire would enable the learners to achieve communicative goals in varied contexts and modalities. Teachers who are trained and equipped to adopt a translingual stance are motivated to learn from IMDL and their families rather than impose their own views.

7.3. Translanguaging Design

When considering translanguaging design, it is important to note that 90–95% of Deaf children come from hearing families (Kuntze et al. 2016; Mitchell and Karchmer 2004, 2005); hence, the same pattern follows in the case of multilingual Deaf students. In addition, Deaf students' linguistic repertoire includes sign languages and spoken languages. Thus, for translanguaging design to have a therapeutic effect, teacher candidates must understand and plan how to implement translanguaging rings and translanguaging shifts and how they relate to instruction and assessment. Translanguaging rings focus on how the translanguaging design attends to the learning experience, language resource materials, and learning assessment. The translanguaging ring aims to ensure that each learner is scaffolded to understand and participate in the lesson by identifying specific tasks and languages depending on each learner's language needs. An assessment plan that adopts a translanguaging ring focuses on how the students perform the assignment or test, how they use their linguistic repertoire to complete the task, and how they use each language (Schissel et al. 2018).

In Deaf education, language is considered critical. Language-learning plans are included in Individualized Education Programs (IEPs), yet IEPs need to consider all learners' languages as resources. To do so, the critical consciousness in decision-making model (CCDM) for individualized education program planning is a great framework that can guide Deaf educators (Broughton et al. 2022). The framework begins by recognizing the need to identify the linguistic ideologies of the IEP team and how they would influence a student's IEP when adopting a translanguaging pedagogy. Next, the model collects information about the student. Educators will need to use various assessment tools to develop a holistic student profile that highlights the student's cultural and linguistic assets (Schissel et al. 2018). Based on the student profile, the team would need to include how the implementation of the IEP will factor in the language/s used for instruction, annual goals, designing interventions, and monitoring progress. In addition, for effective inclusion of translanguaging in the IEP, teachers will need to learn how to collaborate with the stu-

dents' family and community members to address the addresses the strengths and needs identified by the students' holistic profile.

With the translanguaging shift, Deaf education teacher candidates need to be aware of students' language needs and plan moment-by-moment lesson changes. Deaf students, like many bilingual/multilingual students, may not be conscious of their entire linguistic repertoire and how to use its various features for different situations, purposes, and tasks (Garcia and Kleyn 2016). Hence, Deaf education teacher candidates need to know how the translanguaging design will support the learners in identifying and using their full linguistic repertoire. Canagarajah (2011b) observed that bilingual/multilingual students are more comfortable translanguaging with their peers behind their teachers' backs because of the power distance between themselves and their teachers. In addition, some Deaf students only know homesigns, gestures, or their native country's sign language and may not feel comfortable using it with teachers. Through training, teacher candidates can adopt translanguaging shifts as part of their translanguaging design, assuming the role of mentor and model by providing multiple opportunities for their Deaf learners to shift through their linguistic repertoire. Thus, understanding translanguaging shifts supports teacher candidates in examining their power and developing flexibility in negotiating their classroom language practices while centering students.

Armed with knowledge on translanguaging rings and translanguaging shifts, teacher candidates are empowered to interpret the state standards through the lens of linguistic and cultural inclusiveness (Garcia and Kleyn 2016). Deaf education teacher candidates need to acknowledge the linguistic repertoire in their classes that include both spoken and sign languages and make decisions on how to both implement the stipulated standards and assist students in connecting with them. The candidates need to be aware that, sometimes when implementing translanguaging, they may experience disconnection with the standards. These candidates need knowledge and skills in preparing and teaching the specified content standards while implementing translanguaging without watering down the content or depriving students of learning due to language barriers. Additionally, besides attending to required state standards, Deaf educators must address the IEPs for Deaf students with additional disabilities. In the same way, teacher candidates intentionally combine translanguaging practice with the set standards; translanguaging needs to be enforced in implementing IEP objectives in the teaching and learning process. Consequently, Deaf education teacher candidates will need the opportunity to practice intentionality by developing, modifying, and mock-teaching units and lesson plans designed to attend to state standards, IEP objectives, and translanguaging as a practice.

7.4. Translanguaging Strategies

Today, technology is an asset in the learning environment. However, as evidenced during school closures due to the COVID-19 pandemic, Deaf education teacher programs rarely offer a course in educational technology. Hence, most teachers are not equipped with skills on how to use technology, notably on how to support translanguaging practice. Holmström and Schönström (2018) observed how Deaf lecturers were teaching Deaf and hearing (signing) students in a created translanguaging space by creatively using various multimodal technologies. The technologies included white screens, computers, projectors, books, paper sheets, multimedia presentations, Word documents, and Google documents. In creating translanguaging spaces in K-12, Deaf education candidates need to develop skills to use technologies that attend to existing multimodalities used by learners—e.g., signing, gesturing, speaking, mouthing, writing, typing (on mobile phones, on calculators, on computers), and fingerspelling. Hence, teachers need skills to use multimodal media to present the information in images, diagrams/figures, and translation work. With most hearing students, translations have proved to be critical elements of translanguaging. Although sign language is not a written language, Deaf students who are multilingual have prior experience with a different written language, which the teacher can take advantage of in translation. In addition, some multilingual Deaf students use speech with limited

use of signs or gestures; therefore, translation work can support the teacher in engaging the students. It is important to note that multimodal technology is a tool to support translanguaging.

Most Deaf students learn spoken languages through text. To facilitate translanguaging, Deaf education teachers need the training to use the Google Classroom Tool Library and OneNote for Classrooms. In addition, Google Classroom allows Deaf learners to interact with teachers and peers through written English and their vernacular spoken language in text using Google Translate +, Google Dictionary, and Google Read and Write. On the other hand, OneNote for Classrooms has the Multimedia and Immersive Reader feature, allowing Deaf students and their teachers to access reading material in about 80 languages. Both students and teachers can respond to text and translate it into the target language used as the classroom medium of instruction. Allowing Deaf students to access and interact with written L1 and written L2 prevents them from being labeled as students with no language or being deprived of using their written L1 to support their written L2 development.

Although technology acts as a multilingual, multimodal tool that supports translanguaging among Deaf students, Deaf education teacher preparation programs must not advocate the use of technology while diminishing the importance and maintenance of sign languages as minority languages for Deaf students. The goal of translanguaging is to be a therapeutic practice that attends to the issue of language deprivation among Deaf students. Hence, technology in translanguaging should be seen as one way to support multilingual students in using all their possible languages and to support the transfer of written L1 to written L2. Consequently, to maintain the therapeutic nature of translanguaging in Deaf education, teacher preparation programs must implement all elements of translanguaging pedagogy, including translanguaging stance, translanguaging design, and translanguaging strategies.

8. Conclusions

The population of Deaf students in K-12 programs is becoming diverse, and Deaf education teacher preparation programs need to identify ways to support bi/multilingual Deaf students who sometimes experience language deprivation at home and in school. One way is by empowering teacher candidates to adopt translanguaging practices. Translanguaging as a theory and practice is instrumental in the education of bi/multilingual Deaf students because of its potential to recognize, respect, and use all the linguistic repertoires that learners bring to class. In addition, teacher candidates' understanding of the three components of translanguaging pedagogy—translanguaging stance, translanguaging design, and translanguaging strategies—empowers them in supporting learners' language and identity development while learning the expected curriculum content.

Research shows that the implementation of translanguaging is challenging due to existing language ideologies and policies, prescribed curriculum standards, one-size-fits-all testing, and the lack of bi/multilingual resources (Allard et al. 2019; Burton and Rajendram 2019). In Deaf education, the challenges are even more complex because sign language is a visual language and different sign languages are in play. However, the framework for supporting Deaf students' language and literacy development involves signancy, oracy, and literacy, which vary with individual students' language needs. Hence, Deaf education preparation programs can train teachers to use multimodal, multimedia technology when translanguaging to examine and use linguistic repertoires used in oracy and literacy even when they do not understand the learners' sign language.

This article concludes with recommendations for Deaf education teacher preparation programs to consider regarding translanguaging:

1. Teacher preparation curricula need to adopt a translanguaging theory and practice as an independent course or infused element across the courses.
2. Train teachers to conduct translanguaging assessments involving collaboration with other professionals and parents in culturally and linguistically diverse contexts.

3. Support teachers in implementing pedagogical translanguaging and spontaneous translanguaging using hands-on training through practicum opportunities and mentoring on how to design unit and lesson plans aligned with translanguaging.
4. Support teacher candidates in conducting reflexivity of their language ideologies and understanding the process of implementing translanguaging through self-assessment and peer and teacher feedback.
5. Engage Deaf education teacher candidates in action research focusing on translanguaging with K-12 Deaf learners.
6. Because translanguaging is a new concept in Deaf education, the Deaf education teacher preparation program can spearhead the mentoring process by creating interactive alumni sites in which the candidates can continue to discuss translanguaging in the field.

Finally, the author hopes that this article will start the conversation on implementation and research on translanguaging in Deaf education teacher preparation programs and foster the use of the translanguaging approach. Deaf education teachers can embrace translanguaging as a therapeutic practice that attends to the language deprivation of Deaf students who arrive in school with differing language competencies and spoken and sign languages unknown by their teachers and peers.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

References

- Allard, Elaine C., Sarah Apt, and Isabel Sacks. 2019. Language policy and practice In almost-bilingual classrooms. *International Multilingual Research Journal* 13: 73–87. [CrossRef]
- Allen, Thomas E., and Melissa L. Anderson. 2010. Deaf Students and Their Classroom Communication: An Evaluation of Higher Order Categorical Interactions Among School and Background Characteristics. *The Journal of Deaf Studies and Deaf Education* 15: 334–47. [CrossRef]
- Allman, Kate R., and Alexis Guethler. 2021. Translanguaging using technology: Supporting translanguaging practices in the middle school science classroom. *Science Scope* 44: 6–12. Available online: <https://www.nsta.org/science-scope/science-scope-marchapril-2021> (accessed on 10 February 2023).
- Armstrong, David F., and Michael A. Karchmer. 2009. William C. Stokoe and the Study of Signed Languages. *Sign Language Studies* 9: 389–97. [CrossRef]
- Bahan, Ben. 1989. Total Communication: A Total Farce. In *American Deaf Culture. An Anthology*. Edited by S. Wilcox. Silver Spring: Linstok Press, pp. 117–20.
- Baker, Colin. 2006. *Foundations of Bilingual Education and Bilingualism*, 4th ed. London: Multilingual.
- Benedict, Kendra M., Harold Johnson, and Shirin D. Antia. 2011. Faculty needs, doctoral preparation, and the future of teacher preparation programs in the education of deaf and hard of hearing students. *American Annals of the Deaf* 156: 35–46. [CrossRef]
- Broughton, Alta Joy, Steve D. Przymus, Alba A. Ortiz, and Bárbara J. Suarez Cruz. 2022. Critical consciousness in decision-making: A model for educational planning and instruction with bilingual/multilingual students with disabilities. *TEACHING Exceptional Children*, 1–12. [CrossRef]
- Burke, Teresa Blankmeyer, Kristin Snoddon, and Erin Wilkinson. 2016. Genetics and Deafness: A View from the Inside. In *Genetics of Deafness*. Edited by B. Vona and T. Haaf. Basel: Karger, pp. 1–8.
- Burton, Jennifer, and Shakina Rajendram. 2019. Translanguaging-as-Resource: University ESL Instructors' Language Orientations and Attitudes Toward Translanguaging. *TESL Canada Journal* 36: 21–47. Available online: https://link.gale.com/apps/doc/A6047456_54/AONE?u=anon~b9918494&sid=googleScholar&xid=bb5b353a (accessed on 10 February 2023). [CrossRef]
- Calderon, Rosemary. 2000. Parental involvement in deaf children's education programs as a predictor of child's language, early reading, and social emotional development. *Journal of Deaf Studies and Deaf Education* 5: 140–55. [CrossRef] [PubMed]
- Canagarajah, Suresh. 2011a. Translanguaging in the classroom: Emerging issues for research and pedagogy. *Applied Linguistics Review* 2: 1–28. [CrossRef]
- Canagarajah, Suresh. 2011b. Codemeshing in academic writing: Identifying teachable strategies of translanguaging. *The Modern Language Journal* 95: 401–17. [CrossRef]

- Cannon, Joanna E., and John L. Luckner. 2016. Increasing Cultural and Linguistic Diversity in Deaf Education Teacher Preparation Programs. *American Annals of the Deaf* 161: 89–103. [CrossRef]
- Cenoz, Jasone, and Durk Gorter. 2017. Minority languages and sustainable translanguaging: Threat or opportunity? *Journal of Multilingual and Multicultural Development* 38: 901–12. [CrossRef]
- Cenoz, Jasone, and Durk Gorter. 2020. Teaching English through pedagogical translanguaging. *World Englishes* 39: 300–11. [CrossRef]
- Cenoz, Jasone, and Durk Gorter. 2022. Pedagogical Translanguaging and Its Application to Language Classes. *RELC Journal* 53: 342–54. [CrossRef]
- Charrow, Veda R., and Ronnie B. Wilbur. 1989. The Deaf Child as a Linguistic Minority. In *American Deaf Culture*. Edited by S. Wilcox. Washington, DC: Linstok Press, pp. 103–17.
- Chronicle, C. 2019. African Languages among the Top Ten Spoken in U.S. Homes. Available online: <https://www.charlestonchronicle.net/2019/10/15/african-languages-among-the-top-ten-spoken-in-u-s-homes/> (accessed on 10 February 2023).
- Cooper, Robert L. 1989. *Language Planning and Social Change*. Cambridge: Cambridge University Press.
- Creese, Angela, and Adrian Blackledge. 2010. Translanguaging in the bilingual classroom: A pedagogy for learning and teaching? *The Modern Language Journal* 94: 103–15. [CrossRef]
- Creese, Angela, Adrian Blackledge, and Rachel Hu. 2018. Translanguaging and translation: The construction of social difference across city spaces. *International Journal of Bilingual Education and Bilingualism* 21: 841–52. [CrossRef]
- Daniel, Shannon M., Robert T. Jiménez, Lisa Pray, and Mark B. Pacheco. 2019. Scaffolding to make translanguaging a classroom norm. *TESOL Journal* 10: e00361. [CrossRef]
- de García, Barbara A. Gerner. 1995. ESL applications for Hispanic Deaf students. *The Bilingual Research Journal* 19: 453–67. [CrossRef]
- De Meulder, Maartje, Annelies Kusters, Erin Moriarty, and Joseph J. Murray. 2019. Describe. Don't prescribe. The practice and politics of translanguaging in the context of deaf signers. *Journal of Multilingual and Multicultural Development* 40: 892–906. [CrossRef]
- Deaf ed.net. 2022. Deaf Education Teacher Preparation Programs List. Available online: https://deafed.net/sample-page/deaf-education-teacher-preparation-programs-list?page_id=72 (accessed on 10 February 2023).
- Decker, Kalli B., Claire D. Vallotton, and Harold A. Johnson. 2012. Parents' Communication Decision for Children with Hearing Loss: Sources of Information and Influence. *American Annals of the Deaf* 157: 326–39. [CrossRef]
- Dolman, David. 2010. Enrollment Trends in Deaf Education Teacher Preparation Programs, 1973–2009. *American Annals of the Deaf* 155: 353–59. [CrossRef]
- Emmorey, Karen. 2002. *Language, Cognition, and the Brain: Insights from Sign Language Research*. Mahwah: Lawrence Erlbaum.
- Erting, Carol. 1978. Language policy & deaf ethnicity in the United States. *Sign Language Studies* 19: 139–52. Available online: <http://www.jstor.org/stable/26203272> (accessed on 10 February 2023).
- Erting, Carol J. 2003. Language and literacy development in deaf children: Implications of a sociocultural perspective. In *The Young Deaf or Hard of Hearing Child: A Family-Centered Approach to Early Education*. Edited by B. Bodner-Johnson and M. Sass-Lehrer. Baltimore: Brookes Publishing.
- Evans, Lionel. 1982. *Total Communication. Structure and Strategy*. Washington, DC: Gallaudet University Press, pp. 373–98.
- Gallaudet Research Institute. 2008. *Regional and National Summary Report of Data from the 2007–08 Annual Survey of Deaf and HoH Children and Youth*. Washington, DC: Gallaudet University Press.
- García, Ofelia. 2009. *Bilingual Education in the 21st Century: A Global Perspective*. Malden: Wiley-Blackwell.
- García, Ofelia. 2012. Theorizing translanguaging for educators. *Translanguaging: A CUNY-NYSIEB Guide for Educators*. Edited by C. Celic and K. Seltzer. pp. 1–6. Available online: <https://www.nysieb.ws.gc.cuny.edu/files/2012/06/FINAL-Translanguaging-Guide-With-Cover-1.pdf> (accessed on 10 February 2023).
- García, Ofelia. 2019. Decolonizing Foreign, Second, Heritage, and First Languages. In *Decolonizing Foreign Language Education: The Misteaching of English and Other Colonial Languages*. Edited by D. Macedo. New York: Routledge, pp. 152–68.
- Garcia, Ofelia, and Tatyana Kleyn. 2016. *Translanguaging with Multilingual Students*. New York: Routledge Taylor & Francis. ISBN 9781315695242.
- Garcia, Ofelia, and Li Wei. 2014. *Translanguaging: Language, Bilingualism and Education*. London: Palgrave Macmillan. ISBN 9781137385758.
- Garcia, Ofelia, Kate Seltzer, and Susana Ibarra Johnson. 2016. *The Translanguaging Classroom: Leveraging Student Bilingualism for Learning*. Philadelphia: Caslon.
- Goldin-Meadow, Susan. 2020. Discovering the Biases Children Bring to Language Learning. *Child Development Perspectives* 14: 195–201. [CrossRef]
- Grosjean, François. 2008. *The Bilingualism and Biculturalism of the Deaf. Studying Bilinguals*. Oxford: Oxford University Press.
- Grosjean, François. 2010. *Bilingual: Life and Reality*. Cambridge: Harvard University Press.
- Guiberson, Mark. 2013. Survey of Spanish parents of children who are deaf or hard of hearing: Decision-making factors associated with communication modality and bilingualism. *American Journal of Audiology* 22: 105–19. [CrossRef]
- Hall, Joan Kelly. 2019. The contributions of conversation analysis and interactional linguistics to a usage-based understanding of language: Expanding the transdisciplinary framework. *Modern Language Journal* 103: 80–94. [CrossRef]
- Hall, Wyatte C., Leonard L. Levin, and Melissa L. Anderson. 2017. Language deprivation syndrome: A possible neurodevelopmental disorder with sociocultural origins. *Social Psychiatry and Psychiatric Epidemiology* 52: 761–76. [CrossRef]

- Henner, Jon, and Octavian Robinson. 2021. Unsettling Languages, Unruly Body minds: Imaging a Crip Linguistics. Available online: <https://doi.org/10.31234/osf.io/7bzaw> (accessed on 9 February 2023).
- Hesson, Sarah, Kate Seltzer, and Heather H. Woodley. 2014. Translanguaging in Curriculum and Instruction: A CUNY-NYSIED Guide for Educators. Available online: <http://www.nysieb.ws.gc.cuny.edu/files/2014/12/Translanguaging-Guide-Curr-Inst-Final-December-2014.pdf> (accessed on 10 February 2023).
- Higgins, Michael, and Amy M. Lieberman. 2016. Deaf Students as a: Shifting Perspectives and Implications for Teaching and Learning. *Journal of Education* 196: 9–18. [CrossRef]
- Hill, Joseph Christopher. 2012. *Language Attitudes in the American Deaf Community*. Washington, DC: Gallaudet University Press.
- Holmström, Ingela, and Krister Schönström. 2018. Deaf lecturers' translanguaging in a higher education setting. A multimodal multilingual perspective. *Applied Linguistic Review* 9: 90–111. [CrossRef]
- Horejes, Thomas P. 2012. *Social Constructions of Deafness: Examining Deaf Language and Culture in Education*. Washington, DC: Gallaudet University Press.
- Hornberger, Nancy H. 1989. Continua of biliteracy. *Review of Educational Research* 59: 271–96. [CrossRef]
- Hornberger, Nancy H. 1990. Creating Successful Learning Contexts for Bilingual Literacy. *Teachers College Record* 92: 212–29. [CrossRef]
- Hornberger, Nancy H., ed. 2003. *Continua of Biliteracy: An Ecological Framework for Educational Policy, Research, and Practice in Multilingual Settings*. Bristol: Multilingual Matters.
- Hornberger, Nancy H., and Holly Link. 2012. Translanguaging in today's classrooms: A biliteracy lens. *Theory into Practice* 51: 239–47. [CrossRef]
- Howerton-Fox, Amanda, and Jodi L. Falk. 2019. Deaf children as 'English learners': The psycholinguistic turn in deaf Education. *Education Sciences* 9: 133. [CrossRef]
- Humphries, Tom, and Francine MacDougall. 2000. Chaining and other links: Making connections between ASL and English in two types of school studies. *Visual Anthropology Review* 15: 84–94. [CrossRef]
- Humphries, Tom, Poorna Kushalnagar, Gaurav Mathur, Donna Jo Napoli, Carol Padden, Christian Rathmann, and Scott R. Smith. 2012. Language Acquisition for Deaf Children: Reducing the Harms of Zero Tolerance to the Use of Alternative Approaches. *Harm Reduction Journal* 9: 16. [CrossRef]
- Hurst, Ellen, and Msakha Mona. 2017. "Translanguaging" as a socially just pedagogy. *Education as Change* 21: 126–48. [CrossRef]
- Hyde, M. B., and D. J. Power. 1992. The Receptive Communication Abilities of Deaf Students Under Oral, Manual, and Combined Methods. *American Annals of the Deaf* 137: 389–98. [CrossRef]
- International Council on the Education of the Deaf (ICED). 2010. A New Era: Deaf Participation and Collaboration. Available online: <https://handeyes.files.wordpress.com/2016/04/2010-07-iced-resolution-a-new-era-document-2.pdf> (accessed on 10 February 2023).
- Iturriaga, Cristián, and Alys Young. 2021. Deaf Students' Translanguaging Practices in a Further Education College: Situating the Semiotic Repertoire in Social Interactions. *Journal of Deaf Studies and Deaf Education* 27: 101–11. [CrossRef]
- Jacobson, Rodolfo. 1990. Allocating two languages: A key feature of a bilingual methodology. In *Language Distribution Issues in Bilingual Schooling*. Edited by R. Jacobson and C. Faithe. Bristol: Multilingual Matters, pp. 3–17.
- Jankowski, Katherine A. 2013. *Deaf Empowerment: Emergence, Struggle, and Rhetoric*. Washington, DC: Gallaudet University Press.
- Johnson, Harold A. 2004. U.S. deaf education teacher preparation programs: A look at the present and a vision for the future. *American Annals of the Deaf* 149: 75–91. [CrossRef]
- Johnson, Harold A. 2013. Initial and Ongoing Teacher Preparation and Support: Current Problems and Possible Solutions. *American Annals of the Deaf* 157: 439–49. [CrossRef]
- Johnson, Robert E., S. Liddell, and C. Erting. 1989. *Unlocking the Curriculum: Principles for Achieving Access in Deaf Education*. Washington, DC: Gallaudet University Press.
- Jones, Thomas W., and Karen M. Ewing. 2002. An analysis of teacher preparation in deaf education: Programs approved by the Council on Education of the Deaf. *American Annals of the Deaf* 147: 71–78. [CrossRef]
- Kannapell, Barbara M. 1974. Bilingualism: A New Direction in the Education of the Deaf. *Deaf American*, 9–15.
- Ke, I. Chung, and Shumin Lin. 2017. Translanguaging approach to TESOL in Taiwan. *English Teaching & Learning* 41: 33–61. [CrossRef]
- Kleyn, Tatyana. 2016. Setting the path: Implications for teachers and teacher educators. In *Translanguaging with Multilingual Students: Learning from Classroom Moments*. Edited by O. García and T. Kleyn. New York: Routledge, pp. 202–20.
- Koulidobrova, Elena, and Deborah Chen Pichler. 2021. Crippling the "Delay": Multilingualism-Related Consequences of Re-Labeling Language Deprivation Systems. *Frontiers in Communication* 6. [CrossRef]
- Kuntze, Marlon. 1998. Literacy and deaf children: The language question. *Topics in Language Disorders* 18: 1–15. [CrossRef]
- Kuntze, Marlon, Debbie Golos, Kimberly Wolbers, Catherine O'Brien, and David Smith. 2016. School as a Site for Natural Language Learning. In *Diversity in Deaf Education*. Edited by M. Marschark, V. Lampropoulou and E. Skordilis. Oxford: Oxford University Press, pp. 77–109.
- LaSasso, Carol, and Jana Lollis. 2003. Survey of Residential and Day Schools for Deaf Students in the United States That Identify Themselves as Bilingual-Bicultural Programs. *Journal of Deaf Studies and Deaf Education* 8: 79–91. [CrossRef]
- Lederberg, Amy R., and Patricia E. Spencer. 2001. Vocabulary Development of Young Deaf and Hard of Hearing Children. In *Context, Cognition, and Deafness*. Edited by M. D. Clark, M. Marschark and M. Karchmer. Washington, DC: Gallaudet University Press, pp. 73–92.

- Lederberg, Amy R., Brenda Schick, and Patricia E. Spencer. 2013. Language and literacy development of deaf and hard-of-hearing children: Successes and challenges. *Developmental Psychology* 49: 15–30. [CrossRef] [PubMed]
- Leonet, Oihana, Jasone Cenoz, and Durk Gorter. 2017. Challenging Minority Language Isolation: Translanguaging in a Trilingual School in the Basque Country. *Journal of Language, Identity & Education* 16: 216–27. [CrossRef]
- Lillo-Martin, Diane, Ronice Müller de Quadros, and Deborah Chen Pichler. 2016. The Development of Bimodal Bilingualism: Implications for Linguistic Theory. *Linguistic Approaches to Bilingualism* 6: 719–55. [CrossRef] [PubMed]
- Lindahl, Camilla. 2015. *Signs of Significance: A Study of Dialogue in a Multimodal, Sign Bilingual Science Classroom*. Stockholm: Stockholm University.
- Martínez, Ramón Antonio, Michiko Hikida, and Leah Durán. 2015. Unpacking ideologies of linguistic purism: How dual language teachers make sense of every day translanguaging. *International Multilingual Research Journal* 9: 26–42. [CrossRef]
- Meadow-Orlans, Kathryn P., Marilyn Sass-Lehrer, and Donna M. Mertens. 2003. *Parents and Their Deaf Children: The Early Years*. Washington, DC: Gallaudet University Press.
- Meier, Richard P. 2016. *Signed Language Acquisition*. Oxford Handbook Topics in Linguistics. Online edn. Oxford: Oxford Academic. [CrossRef]
- Mitchell, Ross E., and Michael A. Karchmer. 2004. When parents are deaf vs. hard of hearing: Patterns of sign use and school placement of deaf and hard-of-hearing children. *Journal of Deaf Studies & Deaf Education* 9: 133–52. [CrossRef]
- Mitchell, Ross E., and Michael A. Karchmer. 2005. Parental hearing status and signing among deaf and hard of hearing students. *Sign Language Studies* 5: 231–44. [CrossRef]
- Morford, Jill P., and Rachel I. Mayberry. 2000. A reexamination of ‘early exposure’ and its implications for language acquisition by eye. In *Language Acquisition by Eye*. Edited by C Chamberlain, JP Morford and RI Mayberry. Mahwah: Lawrence Erlbaum and Associates, pp. 111–28.
- Musanti, Sandra I., and Alma D. Rodríguez. 2017. Translanguaging in bilingual teacher preparation: Exploring pre-service bilingual teachers’ academic writing. *Bilingual Research Journal* 40: 38–54. [CrossRef]
- Musyoka, Millicent Malinda. 2022. Multilingual Education: Multilingual Immigrant Deaf Students in American Schools. In *Contemporary Issues in Multicultural and Global Education*. Edited by C. Msengi, G. Lartey and K. Sprott. Hershey: IGI Global, pp. 44–65. [CrossRef]
- Musyoka, Millicent Malinda, and Sulaiman O. Adeoye. 2020. Designing an Inclusive Culturally Competent Classroom for Immigrant Deaf Students in the United States. In *Designing Culturally Competent Programming for PK-20 Classrooms*. Edited by J. O’Connor, K. Sprott and C. Msengi. Hershey: IGI Global Publishers, pp. 180–97. [CrossRef]
- National Association of the deaf (NAD). 2008. Position statement on American Sign Language. Available online: <https://www.nad.org/about-us/position-statements/position-statement-on-american-sign-language/> (accessed on 10 February 2023).
- Nover, Stephen M., and Jean F. Andrews. 1998. *Critical Pedagogy in Deaf Education: Bilingual Methodology and Staff Development*. USDLC Star Schools Project Report No. 1. Santa Fe: New Mexico School for the Deaf.
- Nover, Stephen M., Kathee M. Christensen, and Li-Rong Lilly Cheng. 1998. Development of ASL and English competence for learners who are deaf. *Topics in Language Disorders* 18: 61–72. [CrossRef]
- Otheguy, Ricardo, Ofelia García, and Wallis Reid. 2015. Clarifying translanguaging and deconstruction named languages: A perspective from linguistics. *Applied Linguistics Review* 6: 281–307. [CrossRef]
- Otheguy, Ricardo, Ofelia García, and Wallis Reid. 2019. A translanguaging view of the linguistic system of bilinguals. *Applied Linguistics Review* 10: 625–51. [CrossRef]
- Pahz, James Alon, Cheryl Suzanne Pahz, and Glenn T. Lloyd. 1978. *Total Communication. The Meaning Behind the Movement to Expand Educational Opportunities For Deaf Children*. Springfield: Charles C. Thomas.
- Pew Research Center. 2019. Languages Spoken among U.S. Immigrants, 2017: Tabulations of the 2017 American Community Survey (IPUMS). Available online: <https://www.pewresearch.org/hispanic/chart/immigrant-statistical-portrait-languages-spoken-among-u-s-immigrants/> (accessed on 10 February 2023).
- Pizzo, Lianna. 2016. d/Deaf and hard of hearing multilingual learners: The development of communication and language. *American Annals of the Deaf* 161: 17–32. [CrossRef]
- Ponzio, Christina M. 2020. (Re)Imagining a translingual self: Shifting one monolingual teacher candidate’s language lens. *Linguistics and Education* 60: 100866. [CrossRef]
- Poza, Luis. 2017. Translanguaging: Definitions, implications, and further needs in burgeoning inquiry. *Berkeley Review of Education* 6: 101–28. [CrossRef]
- Pungello, Elizabeth P., Iheoma U. Iruka, Aryn M. Dotterer, Roger Mills-Koonce, and J. Steven Reznick. 2009. The effects of income, race, sensitive parenting and harsh parenting on receptive and expressive language development in early childhood. *Developmental Psychology* 45: 544–57. [CrossRef]
- Rendel, Kabian, Jill Bargones, Britnee Blake, Barbara Luetke, and Deborah S. Stryker. 2018. Signing Exact English: A Simultaneously Spoken and Signed Communication Option in Deaf Education. *The Journal of Early Hearing Detection and Intervention* 3: 18–29. Available online: <https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1080&context=jehdi> (accessed on 10 February 2023).
- Ruiz, Richard. 1984. Orientations in Language Planning. *NABE Journal* 8: 15–34. [CrossRef]

- Schissel, Jamie L., Haley De Korne, and Mario López-Gopar. 2018. Grappling with translanguaging for teaching and assessment in culturally and linguistically diverse contexts: Teacher perspectives from Oaxaca, Mexico. *International Journal of Bilingual Education and Bilingualism*, 1–17. [[CrossRef](#)]
- Snoddon, Kristin. 2017. Uncovering Translingual Practices in Teaching Parents Classical ASL Varieties. *International Journal of Multilingualism* 14: 303–16. [[CrossRef](#)]
- Stokoe, William C. 1975. The Use of Sign Language in Teaching English. *American Annals of the Deaf* 120: 417–21.
- Strong, Michael. 1995. A review of bilingual/bicultural programs for deaf children in North America. *American Annals of the Deaf* 140: 84–94. [[CrossRef](#)]
- Swanwick, Ruth. 2017. Translanguaging, learning and teaching in deaf education. *International Journal of Multilingualism* 14: 233–49. [[CrossRef](#)]
- The US Department of Commerce Bureau of Census. 2015. Census Data Documents African Language Use in the United States. Available online: <https://www.jbhe.com/2015/11/census-data-documents-african-language-use-in-the-united-states/> (accessed on 10 February 2023).
- Tian, Zhongfeng. 2020. Faculty First: Promoting Translanguaging in TESOL Teacher Education. In *Plurilingual Pedagogies, Educational Linguistics*. Edited by S. M. C. Lau and S. Van Viegen. Cham: Springer, vol. 42, pp. 215–36. [[CrossRef](#)]
- U.S. Census Bureau. 2018. American Community Survey, "Disability Characteristics". Available online: <https://data.census.gov/table?q=hearing+impairment&hidePreview=false&tid=ACSST1Y2018.S1810&vintage=2018> (accessed on 10 February 2023).
- Vaish, Viniti, and Angel MY Lin. 2020. Introduction: Translanguaging and translanguaging pedagogies. In *Translanguaging in Multilingual English Classrooms: An Asian Perspective and Contexts*. Edited by V. Vaish. Singapore: Springer, pp. 1–10.
- Van Cleve, John V., and Barry A. Crouch. 1989. *A Place of Their Own: Creating Deaf Community in America*. Washington, DC: Gallaudet University Press.
- Wei, Li. 2018. Translanguaging as a practical theory of language. *Applied Linguistics* 39: 9–30. [[CrossRef](#)]
- Wei, Li. 2022. Translanguaging as a political stance: Implications for English language education. *ELT Journal* 76: 172–82. [[CrossRef](#)]
- Wilbur, Ronnie Bring. 1979. *American Sign Language and Sign Systems*. Baltimore: University Park Press.
- Williams, Cen. 1996. Secondary education: Teaching in the bilingual situation. In *The Language Policy: Taking Stock*. Edited by C. Williams, G. Lewis and C. Baker. Llangefn: CAI, pp. 39–78.
- Yoshinaga-Itano, Christine, Arlene Stredler-Brown, and Elizabeth Jancosek. 1992. From phone to phoneme: What can we understand from babble. *The Volta Review* 94: 283–313.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.