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Translanguaging Framework for Deaf Education

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Abstract: In this conceptual article, the authors introduce the Translanguaging Framework for Deaf Education (TFDE), drawing upon two perspectives on language and learning: crip linguistics and critical translanguaging space. The TFDE is a retheorization of the Language Zone, a pedagogical framework for supporting language learning in deaf education, and is designed to support educators to approach language use and users from an asset-oriented perspective. In line with this stance, the TFDE validates the linguistic resources deaf students bring to the classroom and encourages students' full use of their communicative repertoires for meaning making, while also working to expand their linguistic resources and increase communicative flexibility. Examples of translanguaging pedagogical practices with deaf students, such as coming to a shared understanding, building metalinguistic knowledge, and honing communication for external audiences, are explained and illustrated through classroom scenarios with deaf students. Readers are also provided with tools for critically analyzing the social context to ensure accessible and equitable language environments for deaf students and to protect spaces for the use of minoritized languages such as ASL.

Keywords: translanguaging; language pedagogy; deaf education; bilingual; multilingual; metalinguistic knowledge

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1. Introduction

In this paper, we present the Translanguaging Framework for Deaf Education (TFDE), a guide for educators that is aimed at cultivating meaningful multimodal, multilingual communicative processes in deaf education contexts. This framework is a reconceptualization of a language pedagogy framework most recently known as the Language Zone that one of the authors began developing over a decade ago (Dostal et al. 2019; Wolbers 2008, 2010; Wolbers et al. 2012b). The Language Zone, based on theories of first and second language acquisition, was designed to support the language development of deaf students during writing instruction. We retheorize this framework by viewing language pedagogy through critical and humanizing lenses that honor each student's language(s), culture(s), and lived experiences. The TFDE, which can be enacted across educational domains, not only provides pedagogical guidance for interactions that support the language development and linguistic flexibility of deaf students, it does so while striving toward the broader goal of equitable and socially just education systems for deaf persons.

We begin by providing an introduction to translanguaging, with a focus on American Sign Language (ASL) and bilingual education contexts. We then make a case for the role of a translanguaging pedagogy in deaf education. After describing the Language Zone, we propose a need to retheorize it as the TFDE. This new framing brings together the concepts of crip linguistics and critical translanguaging space, two critical perspectives on language use/users from the separate, albeit related, fields of bilingual education and disability studies. We close with a series of examples of how the TFDE is operationalized in the classroom to guide pedagogical decisions that are asset-oriented and dynamic in understanding deaf students' communication repertoires and that maintain a critical lens on language (broadly construed), access, and power in the classroom.

The author team, made up of hearing and deaf scholars, brings different lived experiences and perspectives to this work. Wolbers is a hearing professional who has filled different roles in the field of deaf education as an educational interpreter coordinator, teacher, teacher trainer, and as a researcher of multilingual, multimodal approaches to writing instruction. Holcomb is a deaf researcher who studies language and literacy from a multilingual/multimodal perspective, and they have personally experienced the prejudices that deaf students face regarding their translanguaging practices. Hamman-Ortiz is a non-signing hearing scholar whose research focuses on critical translanguaging pedagogy, which has thus far been applied to spoken language in bi/multilingual contexts.

2. What Is Translanguaging?

Translanguaging (Canagarajah 2011; García 2009; García and Wei 2014) is a term introduced by language education scholars to describe the authentic way that bilingual and multilingual people communicate by leveraging all of their communicative resources for meaning making "without regard for watchful adherence to the socially and politically defined boundaries of named (and usually national and state) languages" (Otheguy et al. 2015, p. 283). Otheguy and colleagues argue that translanguaging can be understood as the inside view of an individual's language system, one that recognizes that the brain does not compartmentalize languages, variations, and/or registers but, rather, integrates all linguistic features into a single, dynamic system—what linguists term an "idiolect". Each person's idiolect is unique, involving a set of communicative resources developed across a lifetime through interactions with others and engagement with texts and other semiotic resources. Henner (2022) provided an analogy to describe this view of language as inside the speaker's mind: "Languages are like rivers. Does an atom of water know it's in the Mississippi River? Does it know when another river feeds into it? It does not. It's just water. But we create these political boundaries and these names. . . ". Thus, as with the water flowing within a river, the linguistic features that comprise an individual's repertoire are constantly changing and adapting according to different contexts of use.

From an outside perspective (a view of language outside the speaker's mind), languages are generally perceived as separate, bounded entities, often (although not always) based on the borders of nations (e.g., "English", "Spanish", "ASL"), despite the fact that linguists have long demonstrated that the boundaries of language are porous (Bybee 2015; Makoni and Pennycook 2007). Viewing English as clearly defined and delimited ignores the role that power and privilege play in establishing so-called "standard" language forms. Strictly delineated language boundaries also do not reflect the reality of global multilingualism. Translanguaging theories (García et al. 2021), therefore, strive to validate the inside perspective, acknowledging that the communicative repertoires of bi/multilingual people are not constrained by the artificial boundaries of "named" languages.

It is important to note that translanguaging theorists, while identifying named languages as a social invention, still acknowledge that languages have a societal reality, whereby individuals are often required to perform monolingually and/or use specific registers or modalities within particular contexts and with certain audiences. However, in contexts in which the compartmentalization of languages is not expected or required, individuals can (and often do) express themselves by drawing upon their whole communicative repertoire, not restricted by monolingual, variation-specific, or register-specific norms (Makalela 2015). By recognizing both realities of the inside and outside perspectives on language, translanguaging provides a useful theory for understanding student language use within the classroom and exploring how dynamic languaging practices can be embraced to validate and deepen students' linguistic knowledge and flexibility (García et al. 2021).

3. Understanding ASL and the Translanguaging Practices of Deaf People

In this section, we provide an overview of the dynamic and flexible nature of ASL and deaf communicative practices. Informed by a translanguaging perspective, we demonstrate

how ASL is expressed through a range of simultaneous and sequential expressions when communicating with varied interlocutors for diverse purposes. We then draw upon crip linguistics theory to provide insights relating to translanguaging among deaf school-aged children who have experienced language deprivation and who are using home sign or gestural communicative practices (perceived as incorrect) rather than named languages. We take the position that such communicative practices are legitimate parts of one's communicative repertoire, and that through validating all idiolects and working toward shared understanding through communication, there is an opportunity to honor individuals and expand their linguistic resources.

3.1. Expanding Perspectives of ASL: Simultaneous and Sequential Expression

In most U.S. deaf communities, ASL and English are the predominant languages of communication, although there are also many minoritized languages and variations (spoken or signed) used by deaf individuals. Unlike spoken languages, ASL is delivered through a visual and spatial signed modality, and, because of this, the language allows for the expression of multiple morphemes, or meaning units, simultaneously within a sign. Gu et al. (2022) explain,

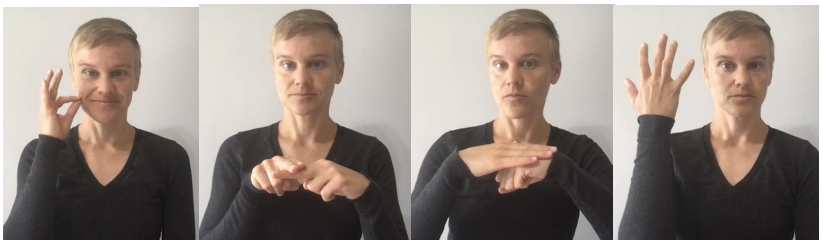
> Given the affordances of the visual modality, simultaneous complexity may be more readily accommodated in sign languages than in spoken languages. Sign languages permit use of two hands, complex handshapes, and up to two types of movement in a single syllable, and they frequently combine morphemes into a single syllabic unit. On the other hand, sequential complexity is more common in spoken languages than in sign languages.

The ability to express multiple meaning units simultaneously in a single sign movement makes signed language unique compared to the sequential nature of spoken languages. In addition, signed expressions have iconic or imagistic properties that more easily evoke mental images linked to meaning (Vigliocco et al. 2005). This is seen in Example A, where one of the signer's hands represents a tree while the other hand represents a cat in a sitting position. The sitting cat is positioned on top of the tree to show location. Thus, the concept ("the cat sits on the tree") is communicated by producing multiple meaning units at the same time, or simultaneously, within a single sign. Hereafter, we call this structure 'simultaneous expression'. Simultaneous expressions in ASL are known for their effectiveness in conveying information in 3-D space and for the creation of iconicity or imagery on the hands. We establish simultaneous expression as a dissimilar concept from simultaneous communication, which is understood as signing and speaking at the same time.

Example A. Simultaneous expression: [THE CAT SITS ON THE TREE][1].

In spoken and written languages, meaning units are typically conveyed sequentially. The English sentence, "The cat sits on the tree", and the Spanish sentence, "El gato se sienta en el árbol", are delivered by speaking or writing one word at a time in a sequential order. Hereafter, we call this structure 'sequential expression'. There are also linguistic variations of signed language that, similar to Spanish and English, can be produced one meaning unit at a time in a sequential order, as seen in Example B and C. Each example has a different ordering of grammatical elements (i.e., Example B shows a subject–verb–

preposition–object syntactic structure while Example C shows an object–subject–verb syntactic structure), yet they express the same meaning one unit at a time, or sequentially.



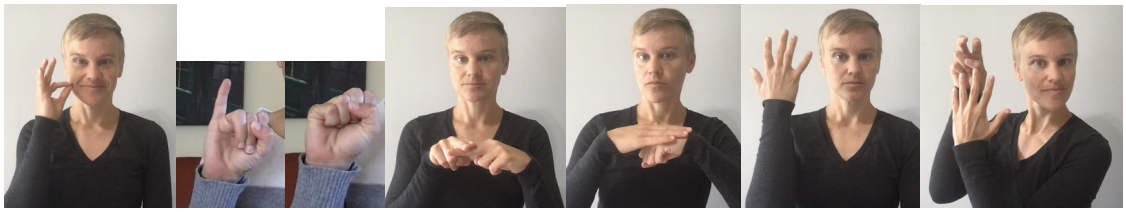
Example B. Sequential expression: [CAT]-[SITS]-[ON]-[TREE].

Example C. Sequential expression: [TREE]-[CAT]-[SITS].

Additionally, these linguistic variations of sequential and simultaneous expressions of meaning units can be combined, as demonstrated in Example D. Here, the simultaneous expression of [THE CAT SITS ON THE TREE] seen in Example A is added to the end of the sequential expression [CAT]-[SITS]-[ON]-[TREE] seen in Example B. Deaf individuals may incorporate both sequential and simultaneous expressions of meaning units to visually enhance the meaning-making process. The use of both simultaneous and sequential expressions of meaning units may also be strategic, perhaps used to address a mixed group of interlocutors (i.e., those with sequential and/or those with simultaneous linguistic knowledge) or to expose others (who are less competent ASL users) to linguistic variations so as to increase their linguistic knowledge and flexibility.

Example D. [CAT]-[SITS]-[ON]-[TREE]-[THE CAT SITS ON THE TREE].

Finally, due to exposure to and instruction in English, deaf bilinguals' expressions often draw upon English features (e.g., the, is, a) through fingerspelling or signs, although these extra features usually do not add much to enhance the clarity of the expressed concept in ASL. See Example E below for an ASL expression that has an English feature ("is") added to it.



Example E. [CAT]-[I-S (fingerspell)]-[SIT]-[ON]-[TREE]-[THE CAT SITS ON THE TREE].

As shown through these examples, ASL has variations of simultaneous and sequential expression of meaning units. In fact, the expressions of signing bilinguals range from simultaneous to sequential, with many possible combinations of simultaneous and sequential expressions (occurring at the word level or phrase level) in between. This variation is represented visually through the use of a continuum arrow in Figure 1. ASL (as with any language) is not a singular, static entity operating in isolation from other languages. Rather, ASL and its syntactic and linguistic variations in expressing meaning units might be better understood as dynamic, inclusive of simultaneous and sequential forms of expression, and features from English or other named languages.

Figure 1. Simultaneous and sequential expression.

From a translanguaging perspective, it is unsurprising that deaf people who know ASL and English often embed English features into their signing (Herbert and Pires 2020) and embed ASL features into their writing (Wolbers et al. 2014), either unintentionally or purposefully, as they are drawing from their full communicative repertoire to make meaning. This can be illustrated by deaf people applying linguistic features of ASL in their writing that only other ASL/English bilinguals would know (e.g., 258, veevee, true biz, peipei, train go sorry). Such expressions of deaf bilinguals show how their brains are operating from one unified linguistic system (or idiolect), in which they are accessing ASL and English linguistic resources, and how audience and context play a key role in communicative choices.

Furthermore, deaf people are known to sign more sequentially and embed English features when they find that the interlocutor is not fluent and flexible in their use of ASL's simultaneous features. Deaf people are also known to use simultaneous expression to boost language acquisition and increase the communicative understanding of deaf toddlers or to enhance the clarity of concepts with school-aged deaf students, deaf persons who have experienced language deprivation, or international deaf people who do not know ASL or English (De Meulder et al. 2019; Kusters 2020; Kusters et al. 2017, 2021). As these examples demonstrate, language and communication extend beyond the traditional boxes people typically put deaf persons in with statements such as "They only use ASL/they are fully visual" or "They only use spoken English/they are fully oral" (Nussbaum et al. 2012). Translanguaging recognizes that deaf people, same as any other bilinguals/multilinguals

in the world, draw upon various linguistic resources and modalities to effectively navigate communication with others.

3.2. Expanding Perspectives of Deaf Individuals' Repertoires: Insights from Crip Linguistics

In framing the communicative repertoires of deaf individuals, we also draw upon crip linguistics from the field of Disability Studies (Henner and Robinson 2021). Crip linguistics problematizes the idealized myth of normative speech and language by recognizing that all bodies, and especially disabled bodies, think, move, and produce language in diverse ways. Many deaf children reach the age of five not having prior experiences with successfully accessing "named" languages, such as spoken English or ASL, and experience the traumatic impact of language deprivation as a consequence. For these children, their communication happens through various forms of gesture, home signs, and home vocalizations. This is referred to as the deaf child's initial communication system (Koulidobrova and Pichler 2021). Because this initial communication system is not a "formal" or "standard" language, it is often stigmatized or perceived as invalid. A crip linguistics perspective, however, views disabled people's ways of communicating as normal rather than something that needs to be avoided or remediated (Donato et al. 2018). As with a translanguaging stance, this perspective sees language as embedded in the mind and body rather than being outside of it.

The concept of "care work" is well known in Disability Studies, where interdependence and taking care of each other is valued and prioritized (Piepzna-Samarasinha 2018). Crip linguistics extends this conception to include "linguistic care work", (Henner and Robinson 2021) or honoring and supporting the disabled person's efforts to communicate without using abled norms as the standard by which they are judged. Rather, communication partners acknowledge that language is bound to their bodies and minds, with each individual having different approaches to communicating. They care about what each other has to say and work collaboratively to achieve mutual understanding using all of the resources they have at their disposal. This means embracing a wide range of multimodal communication practices (e.g., gesturing, drawing, acting out, making facial expressions, showing pictures) as valid tools for negotiating meaning.

One example of this is the organic emergence of a new signed language, Nicaraguan Sign Language (Senghas et al. 2004), which emerged from bringing together deaf people who had experienced chronic language deprivation. These deaf individuals were invested in understanding each other through their own home signs and gestures, resulting in the development of more complex language patterns. This example reveals the importance of seeing deaf people's existing communication repertoires as valuable resources that can be built upon through greater engagement in meaningful and accessible social interactions. Because of years of experience engaging in linguistic care work, deaf adults are known to understand deaf children's home signs or initial communication systems better than their hearing parents or other hearing adults (Carrigan and Coppola 2017; Paul et al. 2020). For this reason, deaf sign language interpreters have become increasingly popular in working with deaf children and deaf individuals (Boudreault 2005). These same skills in "linguistic care work" that deaf adults possess can also be developed by hearing laypeople, teachers, and parents through commitment and practice. The first step is to adopt the perspective that the deaf child's initial communication system is valid, meaningful, and can be understood through committed effort. By building on shared understanding, the deaf child's communicative repertoire can be expanded.

To summarize, applying a crip linguistics perspective entails beginning with the communication system of the learner (not the "standard" or "named" language systems). This parallels translanguaging scholars' push to begin from the inside perspective of the learner and their whole communication repertoire, rather than looking at them through the outside perspective of separate, named languages (Otheguy et al. 2015).

4. Translanguaging in Education

As the concept of translanguaging has been applied to educational contexts, there has been a surge of interest in promoting translanguaging pedagogies. Translanguaging pedagogy is described as "... a process by which students and teachers engage in complex discursive practices that include all the language practices of students... " (García and Kano 2014, p. 261). Translanguaging pedagogies range in their design, from the open-ended inclusion of multiple languages and language varieties (e.g., a multilingual writing project in which students draw upon their full linguistic and semiotic repertoire to communicate meaning) to more targeted language learning activities (e.g., engaging students in a bilingual classroom in contrastive analysis of adjective placement in the two instructional languages). Research has identified manifold benefits of translanguaging in the classroom, including its use as a means to mediate the acquisition of new concepts and vocabulary, cultivate metalinguistic awareness, and encourage more participation and engagement (Daniel and Pacheco 2016; Gort and Sembiante 2015; Henderson and Ingram 2018; Martin-Beltrán 2014; Seilstad et al. 2021; Tian 2022).

Yet, amid the enthusiasm for translanguaging pedagogies, there are some who question the "adequacy" (Guerrero 2021) or "sustainability" (Cenoz and Gorter 2017) of translanguaging in all educational contexts, especially those involving the teaching of minoritized languages or minoritized language users. In a world free of power imbalance, a pedagogical approach that embraces all the language practices of all students may be ideal. In reality, there are legitimate concerns that opening up flexible languaging spaces for students might threaten spaces for minoritized languages. Additionally, in deaf education, access becomes a major concern when translanguaging pedagogies are introduced in the classroom, given that some students may not be physically able to access spoken modalities (De Meulder et al. 2019). The field of deaf education has not adequately addressed these concerns or clarified a framework of translanguaging within classrooms that serve deaf students.

We believe that the concerns raised against the use of translanguaging pedagogies in deaf education, and in bilingual education more broadly, can be addressed through a (re)centering of minoritized students and their languages (Cenoz and Gorter 2017; García and Lin 2017; Hamman 2018) and through increased attention to situated contexts for language use and learning. We also believe that it is possible for classroom instruction with deaf learners to honor and strengthen students' unique and flexible communicative repertoires while also expanding their linguistic toolboxes to be able to satisfy social demands and communicative partners' needs for production in one language. For this to happen without causing further harm to minoritized languages and their users, we propose that translanguaging pedagogies be designed with a critical eye toward the social context, thus allowing for the interrogation of inequities and the prioritization of accessible language environments for deaf learners. These concepts are exemplified in the concept of critical translanguaging space (Hamman 2018), which we believe provides a useful lens to ensure that translanguaging practices do not cause asymmetries in language access for deaf students.

4.1. Expanding Perspectives of Translanguage Pedagogy: Insights from Critical Translanguaging Space

To effectively and equitably engage in translanguaging pedagogy, teachers must understand how language ideologies and power influence language and semiotic resources and practices in the classroom. Students' translanguaging practices are undoubtedly impacted by perceived language hierarchies. Even within bilingual classrooms that privilege minoritized languages, the dominant societal language can become students' preferred language of communication because of the perceived status of the language (Babino and Stewart 2016; Hamman 2018). Based on her research in two-way bilingual classrooms with hearing students using Spanish and English, Hamman (2018) proposes a context-based understanding of translanguaging pedagogy that involves both flexible and focused spaces for language use. She terms it a *critical translanguaging space*, or a discursive learning space

that allows for flexible language practices reflective of individuals' idiolects while also prioritizing the minoritized language and minoritized language speakers. She writes,

> I argue that a critical translanguaging space requires not only the rejection of static notions of language and bilingualism, but also the recognition of language hierarchies within particular sociolinguistic spaces that necessitate 'focused' spaces for minority language use and development. This does not belie the need for 'flexible' language spaces that encourage translanguaging and facilitate metalinguistic connections, but it does require that the decisions for how and when to create those spaces be intentional. (p. 38)

Cultivating a critical translanguaging space can help teachers and researchers conceptualize how their classrooms may make space for learners' authentic languaging without ignoring the pervasive hegemony of the majority language. To do so, one must critically consider students' exposure to languages and how they are impacted by the ideologies behind these languages. Accordingly, flexible translanguaging is encouraged at times, while, at other times, students have focused and "protected" spaces for use of the minoritized language (Cenoz and Gorter 2017). Flexible translanguaging spaces (e.g., using Spanish/English freely) are necessary to maximize student learning and meaning making by allowing them to use their full communicative repertoires. Yet, the legitimacy of Spanish as a minoritized language is recognized and reinforced in focused spaces where students are encouraged to use (only) Spanish to communicate understandings. In this protected space, students' language preferences are not the focus; rather, the scaffolding of their skills in the minoritized language becomes a priority. In this paper, we apply Hamman-Ortiz's critical translanguaging space to educational contexts with deaf learners, revealing how flexible uses of translanguaging can serve as a scaffold for language and conceptual learning without losing sight of the importance of ensuring focused, protected spaces for the use of ASL and other minoritized languages. We argue that through intentional and strategic translanguaging spaces, it is possible to uplift minoritized languages, carve out space for ASL, and provide students with greater access to language(s) in ways that are relevant to their lives and communities and that help to expand their communicative repertoires.

4.2. A Case for Critical Translanguaging Space in Deaf Education

A critical translanguaging space in the schooling of deaf children is critically important given the history of English dominance, such as the invention of English sign systems devoted entirely to learning English, the history of limiting the role and involvement of educators who are deaf, and the prohibition of signed languages (e.g., ASL) in schools for nearly a century (Snoddon 2017). While ASL is the third most popular world language taken by hearing college students (Looney and Lusin 2019), most deaf children still have limited exposure to ASL at home, in school, and in the community due to systemic barriers and language ideologies that favor English monolingualism. Deaf students in mainstream schools often feel shame and embarrassment when using ASL in the midst of peers, teachers, and families who do not know the language or show little interest in learning and improving their signing skills (Jambor and Elliott 2005; Skelton and Valentine 2003). Not to mention, the educational system often revolves around developing deaf students' speaking skills and uses it as a benchmark of success for their IEPs (Hall et al. 2019). Although undocumented in formal research, it is common for these deaf students to report that they prefer to speak so that they can assimilate, make their teachers and parents proud, and not be singled out in the crowd. Translanguaging without a critical lens to this reality often leads to practices that cause asymmetries of language access in ways that center and privilege those who have auditory access to spoken language and, more broadly, access to English in any form (De Meulder et al. 2019). It is important to be clear about how teachers can embrace translanguaging pedagogy in ways that validate the wide range of ways that deaf students make meaning while not compromising their language access and the expansion of their linguistic and communicative repertoires at school.

There are essential concerns to discuss when weighing the role of named languages and their modalities in learning spaces shared by deaf students. We cannot afford to minimize the use of signed language in schools, as it is the only fully accessible language to deaf students through which language acquisition, complex reasoning, and social/emotional development occur. Deaf students, regardless of their hearing technologies and hearing/speaking capabilities, do not hear as hearing students do. Therefore, teachers must be cautious when they decide to use spoken language in a classroom with deaf learners by continuously reflecting on the extent to which they are providing accessible language and learning opportunities for all deaf students or creating inequitable language access that may cause further harm to some or all. They should regularly check that deaf students who have some auditory access do not exhaust their cognitive load deciphering what is being said. Simultaneously, they should ensure that deaf students with reduced amounts of auditory access do not miss out on communication taking place in the classroom. In classroom situations where an ASL/English interpreter is present or where simultaneous communication is used (speaking and signing at the same time), the teacher must acknowledge that interpretation or simultaneous communication may only provide partial access to the classroom discourse (Caselli et al. 2020; Tevenal and Villanueva 2009; Wolbers et al. 2012a), and they should search for ways to overcome the serious limitations deaf students face in accessing classroom language and content. In summary, when translanguaging in the classroom results in a heavier reliance on spoken English, it serves to exclude some or all deaf persons, which is the opposite of what translanguaging scholars seek to promote. The application of a critical lens in a translanguaging framework designed specifically for deaf students is needed.

5. A Framework for Translanguaging in Deaf Education

Having established our conceptual grounding, we now turn to the task of delineating a framework for translanguaging pedagogy in deaf education. To begin, we review an earlier framework for guiding language pedagogy in deaf education contexts that was initially developed by the first author. We then present the retheorized TFDE and outline its core tenets and pedagogical principles before sharing case study examples of how to put it into practice.

5.1. Prior Conceptions of Languaging Pedagogy in Deaf Education: The Language Zone

In previous work, deaf education scholars conceptualized a Language Zone (LZ) space where teachers and students engage in communication-oriented strategies during collaborative writing (see Dostal et al. 2019 for a fuller description). After a brief summary of the LZ, we provide a rationale for the reconceptualization of the LZ as the TFDE, with expanded application across educational contexts and settings.

The LZ was conceived as a space in the classroom (including board and floor space) where collaborative writing participants could work together using various strategies to clarify, negotiate, and expand language meanings. In Figure 2, we show the LZ flowchart, which provides instructional options and language tasks that the teacher determines are needed based on a student's language contribution to group work. These include pairing understood concepts with accessible language, translating between ASL and English, and enriching or expanding language expressions. Teachers and students enter the flowchart from the left side and can navigate to any tier (bottom, middle, or top tiers) in response to the language needs presented in the student's expression. There is a general understanding of progression through the chart from bottom to top and left to right, as the original expressed idea is gradually transformed into collaboratively written text (on the right side).

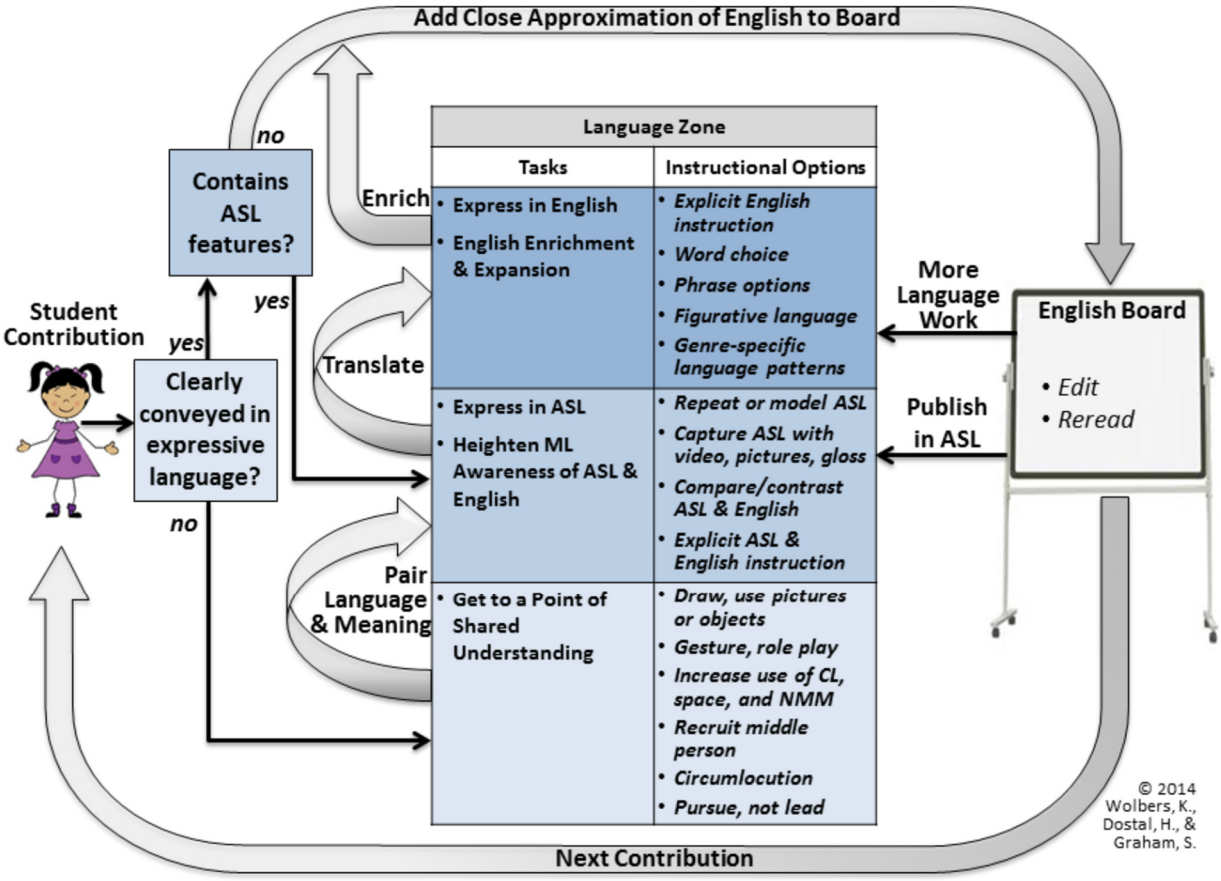


Figure 2. Language Zone flow chart of teacher decision making.

When a student's expressed ideas are not understood by others in the class, the LZ space can be utilized to first build understanding among community members (see bottom tier of LZ flowchart). Various tools may be employed to convey meaning in more visual or concrete ways, such as drawing, acting out, gesturing, and bringing physical items or pictures into the space. Once there is shared meaning of expressed concepts in the group, the teacher pairs the concrete or visually understood meanings with equivalent ASL expressions. From there (moving from the bottom tier to the middle tier), the teacher guides students in translating the concepts from ASL to English and determining English equivalents. At this time, the teacher is attempting to heighten students' metalinguistic awareness of ASL and English by explicitly identifying and distinguishing linguistic features of ASL and/or English (Wolbers 2010). After facilitating the translation of ideas to written English, the students may receive English enrichment (see top tier) to refine or enhance the idea prior to publication.

5.2. Retheorizing the Language Zone as the Translanguaging Framework for Deaf Education

We have reconceptualized the LZ model into the TFDE to provide a more dynamic visual model of translanguaging processes for deaf education—one that illustrates decisions related to language uses associated with varied goals happening in multiple, simultaneous, and even recursive directions. As explained above, in the LZ model, a teacher's decision-making process about language begins with a student's initial contribution in any language and ends with a co-constructed product in English. There is a general progression of language strategies (from left to right and bottom to top) enacted by the teacher that are designed to understand, translate, and expand a student's expression for the end goal of constructing written English text (and optionally ASL video publication) for a specified purpose and external audience.

The new model broadens the applicability of translanguaging pedagogy to communicative purposes that are inclusive of and move beyond the end goal of writing English and/or publishing ASL. The TFDE captures translanguaging pedagogies that support multiple modes of receptive (e.g., viewing, listening, reading) as well as expressive communication (e.g., signing, speaking, writing) happening across content classes and educational settings, which means interactions are not bound to a singular space or board. There is recognition that individuals are drawing upon their full communicative repertoires to express and understand communicated ideas and that, when permitted to communicate flexibly, expressions are inclusive of the multiple languages, modes, linguistic variations, semiotic resources, and initial communication systems that have come to form each individual's idiolect. When making connections between expressions in individual idiolects and named languages, it is done with clear communicative purpose (e.g., understanding what is being communicated from or to another), while also critically considering language access for all deaf participants and working to dismantle inequitable systems and structures for deaf persons. Finally, this new model is asset-based in that there is recognition of each person's individual linguistic repertoire as being valid, such that, through translanguaging pedagogies, participants' idiolects may be expanded or given greater flexibility rather than rejected, fixed, or replaced.

6. Presenting a New Model: The Translanguaging Framework for Deaf Education

For the remainder of this paper, we will explore the affordances of the TFDE as a new model for supporting deaf learners in the classroom. First, we review the visual representation of the TFDE (see Figure 3). Each element of the model is depicted in a side box where the title indicates the objective of that element with the associated instructional decisions in bulleted form. After providing detailed explanations of each component, we illustrate use of the model through educational scenarios with examples of enacting translanguaging pedagogical decisions with deaf learners. Finally, we leave the reader with considerations for how to successfully implement the TFDE and how to avoid pitfalls that inflict greater harm on deaf students.

6.1. Validating Individual Idiolects

At the center of the model are the teachers' (T) and students' (S) individual idiolects—all of which are viewed as unique yet meaningful sets of communicative resources. The TFDE thus begins not with a given language or utterance, but with individual communicative repertoires as the starting point for learning and communication, which may include or not include named languages. Critically important to this model is the teacher recognizing all students' idiolects and viewing them as valid. As we have discussed, deaf students come from diverse linguistic backgrounds and have varied access to spoken, signed, and written languages, which may include ASL, English, and/or other home languages. Sometimes deaf students do not know any named languages; rather, their initial communication systems have been developed through innovations for communication at home. Language deprivation can persist through prolonged inaccessible communication in schools where spoken language is primarily used without prioritizing linguistic care work, multimodal communication practices, or signed language.

It is our position that learning spaces must be inclusive of deaf children's initial communication systems as they are valid ways of languaging and making meaning with others. Forms of deprivation experienced by children, including communication/language deprivation and neglect, cause trauma and harm. When people perceive the existing resources that children use to communicate as wrong, unnatural, and/or broken, their trauma is exacerbated. These deficit-framed perceptions and language conceptions to which power is often attributed are dehumanizing and must be challenged. Akin to asset-oriented perspectives that view the learner as a dynamically lingual being (Flores 2013), we can acknowledge both the harmful impact of language deprivation as well as the validity of one's existing communication repertoire.

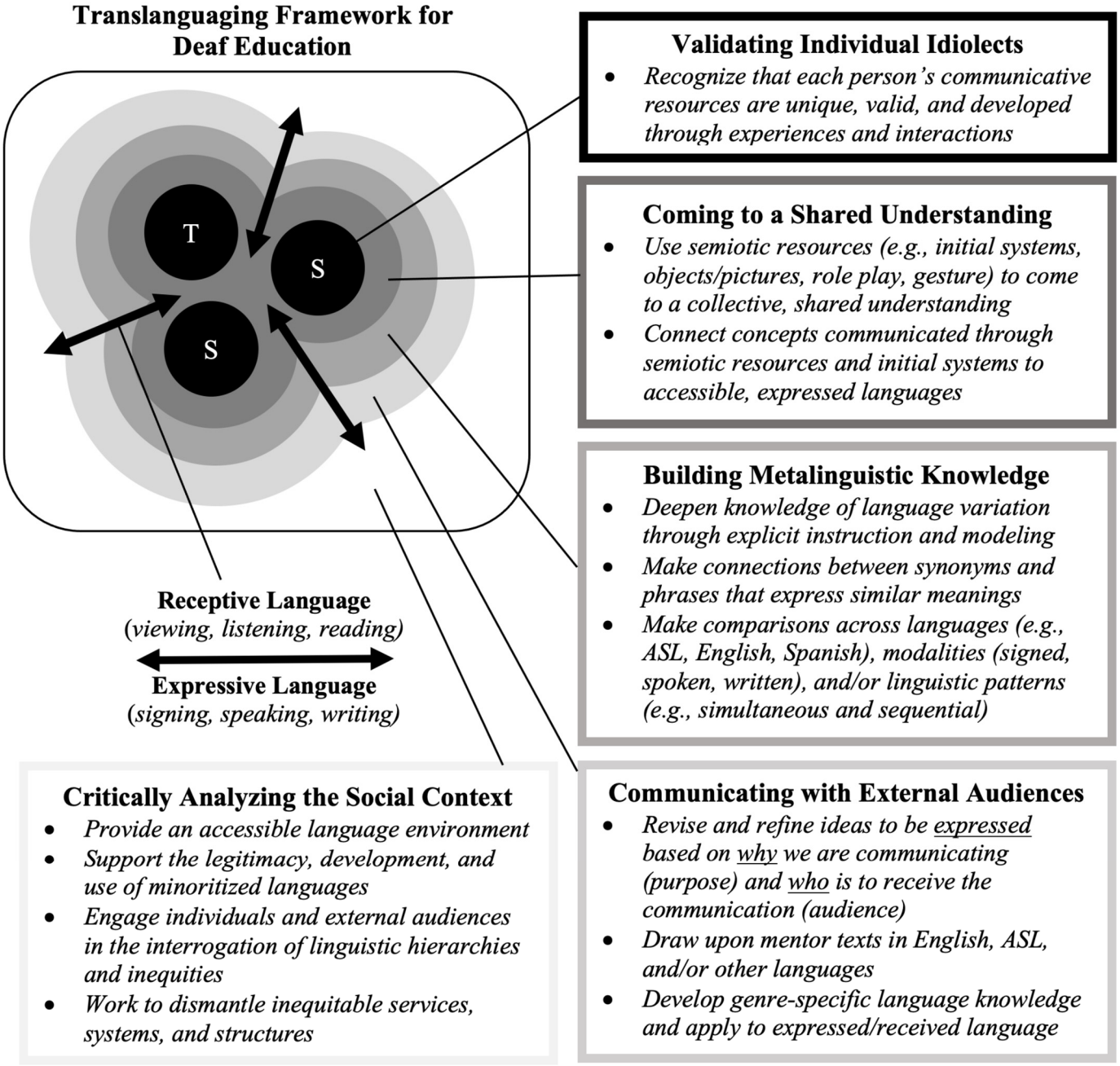


Figure 3. Visual model of the Translanguaging Framework for Deaf Education.

Rather than judging students' ways of communicating as right or wrong, beginning with a validation of and interest in understanding students' idiolects welcomes their different ways of expressing ideas while making space for discussing and intentionally linking other forms of expression that are needed for the context and audience involved. Within the TFDE, teachers are thus committed to engaging with students in linguistic care work by meeting students where they are with their unique communicative repertoires.

6.2. Coming to a Shared Understanding

The TFDE then expands outward to visually represent how (language) learning in the classroom gradually extends into new and overlapping communicative goals as students negotiate meaning with/for their teacher and classmates. The first step along the way is coming to a shared understanding. If students are attempting to express a message that is not understood by their communication partners (or an external audience), or if they

are having difficulty understanding a message communicated to them, teachers can utilize a wide range of semiotic resources (e.g., drawing, role playing, using objects, showing pictures/videos, and gesturing) and draw upon students' initial communication systems to clarify the meaning of what is being communicated. During these exchanges intended to build understanding, teachers will avoid using inaccessible modalities (e.g., speaking) and named languages (e.g., ASL or English) in isolation when they are not comprehensible to students. Once participants have collaboratively made meaning and arrived at a shared understanding through the use of semiotic resources and initial communication systems, understood concepts are immediately connected to accessible named languages (e.g., ASL).

6.3. Building Metalinguistic Knowledge

Once shared understandings are established, teachers work on building and deepening students' metalinguistic knowledge and communicative repertoires. A translanguaging lens reinforces the fact that skilled communicators are flexible, dynamic, and capable of tapping into various semiotic and linguistic resources to arrive at a shared understanding with diverse communication partners. It follows that it is not ideal for the deaf individual to perform as a monolingual, but rather as a flexible communicator armed with many linguistic strategies to support meaning making. Becoming a more flexible communicator involves continually building one's linguistic resources into a broader set of tools that span named languages, language variations, and modalities. We purport that a goal of language learning processes is to increase metalinguistic knowledge and one's communication flexibility by analyzing the similarities and differences of linguistic properties and their applications across named languages.

Building metalinguistic knowledge is achieved through supporting students in understanding that there are always multiple ways to express the same concept and by drawing their attention to similarities and differences across named languages. Through explicit instruction and modeling, teachers bring attention to synonyms and phrases that express similar meanings. Teachers engage students in making comparisons of how certain meaning units can be expressed in different named languages and across language variations (e.g., ASL, Black ASL, English, Appalachian English, African American Vernacular English), modalities (signing, speaking, writing), and linguistic variations (e.g., sequential and simultaneous expressions of meaning units) that are used by students, their communities, and external audiences. Students are given opportunities to practice their receptive and expressive skills in contexts that elevate their metalinguistic knowledge, linguistic competence, and communicative flexibility.

6.4. Communicating with External Audiences

The outermost ring is focused on deepening students' communicative repertoires so that they can effectively understand communication from or can effectively communicate ideas to audiences outside the classroom. In this component, students consider the purpose of a message and identify the genre-specific language relevant to the purpose (e.g., to entertain, to inform, to persuade). They also think about the target audience who will receive the message (e.g., deaf students in Mexico, the president of the U.S., family members, museum attendants). In doing so, students strategically analyze their own communicative repertoire and consider their audience's potential communicative repertoire as they negotiate how to deliver messages in ways that their audience will understand. This process involves rereading or re-viewing, reflecting, revising, and refining their expressed ideas. In this stage, teachers also share example texts/videos with students to analyze, explicitly discuss, and compare forms of expression. These mentor texts/videos provide models of genre-specific writing traits or language features that students can observe, practice, and integrate into their own compositions.

Deaf students are also readers and viewers (and sometimes listeners) of external audiences' composed ideas, which can be communicated through print, video, and/or presentation. Teachers provide support to students as they seek to understand what is

being communicated. By examining the authors' purpose and the audience of existing texts/videos/presentations, one can apply genre-specific knowledge to communicative contexts to make sense of linguistic forms being used. They can also use their genre-specific knowledge to analyze whether authors are effective at conveying their message for their intended purpose and audience.

6.5. Critically Considering Social Context

Finally, and importantly, the TFDE requires teachers to elevate their own awareness of the inequities that exist within and outside of the social context of their classroom and to work determinedly toward dismantling them. For example, a teacher might begin to recognize unjust practices such as teachers and students using spoken language in an educational setting where spoken language is not accessible to all members. Recognizing inequities is a necessary step in instituting new policies or procedures that have the potential to support all deaf students' engagement in academic and social communications. Another example would be the expectation that teachers and students exclusively use a designated named language in educational spaces when all members do not have the linguistic background to do so. By critically considering the social context, teachers can conscientiously provide an accessible language environment that engages and cognitively stimulates all students. Extra care is taken to ensure access for routinely disenfranchised students (e.g., those with less hearing and speech or those exhibiting language deprivation) and to be inclusive of languages and variations that have been traditionally marginalized in U.S. educational contexts (e.g., Black ASL). Further, teachers engage students and external audiences in the interrogation of linguistic hierarchies and inequities through metacognitive questioning (e.g., why do we use this language for this purpose? Does it mean other forms are less valid or correct? In what situation would this other form have greater utility, and for what purpose?). Within their spheres of influence, teachers work to identify and dismantle inequitable linguistic services, systems, and structures.

Furthermore, a critical analysis of social context involves careful consideration of language hierarchies and ideologies that might influence communicative norms and practices within the classroom. In deaf education, a consideration of language hierarchies means that teachers of deaf students should design flexible spaces that allow students to communicate using their full communicative repertoires (inclusive of semiotic resources, modalities, linguistic variations, initial communication systems), while also protecting space for signed language and its linguistic variations, which are too often marginalized in the classroom (De Meulder et al. 2019; Swanwick et al. 2022). It must be openly acknowledged that signed language, due to its modality, is the most accessible language in which deaf students can engage with the meaning-making, problem-solving, and self-regulation processes required for academic tasks. Teachers who critically consider social context will challenge the notion of limiting the interactions and activities of deaf students to only those that can be heard, spoken, or written. In flexible and focused educational spaces, deaf students are encouraged to employ all of their semiotic and linguistic resources, while also having designated time for the use and deepening of signed language and its variations. One example of a protected space for ASL is providing opportunities for deaf students to focus on the development of their composition skills in ASL through the creation of videos for signing audiences of varying genres (e.g., personal narratives, information reports, argumentations, and poetry).

In sum, by employing the TFDE, teachers and students can collaborate to meaningfully communicate their messages to each other and to audiences outside of the classroom, as well as understand the messages communicated to them, all while applying a critical lens on linguistic boundaries and hierarchies.

7. Application of the Translanguaging Framework for Deaf Education

As this model is context-driven and student-centered, the pedagogical decisions that teachers make will depend upon each student's expression (expressive skills) and

understanding (receptive skills) during authentic communication. In the following sections, we provide a few scenarios to illustrate how the TFDE can be employed in different communicative contexts involving deaf students. The classroom scenarios are drawn from our collective experience as teachers of deaf students and involve two students, Felix and Gabrielle, who represent two cases of deaf students born into hearing families. Felix comes from Spanish-speaking hearing parents and uses an initial communication system (e.g., gesturing, home signs, vocalizations). Gabrielle has English-speaking hearing parents who started learning and using ASL with Gabrielle when she was identified at birth as deaf. We describe various ways teachers can apply the TFDE with Felix and Gabrielle, who have very different language experiences and skills.

7.1. Suzie's Class

Suzie teaches a second grade class of six deaf students, two of whom are Felix and Gabrielle. Suzie is comfortable and flexible in her use of ASL and English and knows basic Spanish. Through the application of the TFDE in activities across content lessons, Suzie engages in linguistic care work and supports students in developing communicative flexibility by strategically and purposefully using translanguaging pedagogies to compare and contrast various languages, modalities, and variations (with considerations of their target audiences) and by making space for students to leverage their full communicative repertoires to make meaning.

7.2. Felix

7.2.1. Validating Individual Idiolects and Coming to a Shared Understanding

Felix, a new student, just moved to the area. Suzie asks Felix in ASL, "How are you?" Felix looks puzzled by the expressed message. Suzie recognizes the need to learn more about Felix's idiolect. She begins by drawing upon available semiotic resources with the use of facial expressions, gesturing, and an existing "emotions" anchor chart. She points to the poster on the wall, which has drawings of multiple faces to represent angry, sad, nervous, happy, and tired. In succession, she points to her chest, the picture of the happy face, her face, and then smiles. She gestures without using any named language, indicating for Felix to choose which face on the poster matches his feeling. Felix points to the nervous picture and produces a home sign that was dissimilar from ASL. Suzie nods reassuringly to show that she understands what he means. She points to the nervous picture and copies Felix's home sign, validating his initial communication system and idiolect. She gestures again, asking Felix to provide his home signs for the rest of the emotions on the poster. In that moment, Suzie marvels at Felix, recognizing him as an innately lingual being who has developed systems of communication with those in his environment even when provided with little accessible language input. Suzie continues to acknowledge and copy each sign produced by Felix and then make connections between those and ASL signs.

Given the visual affordance and clarity in the iconicity and imagery of simultaneously signed meaning units, Suzie uses this approach as much as possible to continue to support Felix's understanding and language learning. For example, when talking about sea animals in science class, Suzie points to a picture in their book of a whale swimming underwater, and then provides a simultaneous expression to represent this meaning (see Example F). By pointing to the picture first, she ensures that everyone in the class, including Felix, has a shared understanding of what is being communicated. By signing the meaning units simultaneously, she leverages the rich and creative integration of body, facial expression, and space to represent the movement, location, and shape of the sea and the whale. Given Felix's limited knowledge of ASL, and even more limited knowledge of spoken languages, a simultaneous expression high in imagery is likely more accessible than a sequential expression (as shown in Example G).

Example F. [A WHALE SWIMS UNDER THE SEA]

Example G. [WHALE]-[SWIM]-[UNDER]-[SEA]

7.2.2. Building Metalinguistic Knowledge

Over the next few months, Felix is invited to share more home signs with the teacher and other students in his class. At home, he also begins teaching his family the ASL signs he is learning at school. Because his expressions are always welcome in the classroom and are viewed as valid, albeit different, ways of communicating, he does not feel ashamed of the variety in his language use. In fact, he becomes fascinated with different ways of expressing the same concepts. Felix's communicative repertoire thus expands through the intentional connecting of semiotic resources and his initial communication system to ASL, and thereafter through the connection of understood words and phrases across languages, modalities, and variations. For example, Suzie begins to add sequential signed expressions to her simultaneous signed expressions, as illustrated in Example D earlier in the paper or through a combination of Examples F and G. In doing this, Suzie is increasing Felix's ASL linguistic flexibility and also forging linguistic bridges in the direction of English and Spanish (another language used by members of the classroom and Felix's home community) via the shared linguistic properties of sequential signed expressions and spoken/written language.

Suzie not only models expressions through linking or "chaining" (Humphries and MacDougall 1999) sign variations, she also builds students' metalinguistic knowledge by explicitly talking with students about linguistic variation and shared linguistic properties. She refers to simultaneous expression as "3-D spatial sign" and explains that it allows for the expression of multiple meaning units at the same time through facial expressions, hand and body movements, and use of space around the body. When using sequential signed expressions, Suzie explains how each meaning unit is signed one after the other in a sequence. The class discusses how 3-D spatial signs can support their expression/reception of new or challenging concepts and how sequential signed expressions can serve as an intermediary to reading and writing in English or Spanish (e.g., sharing an idea via a simultaneous expression, chaining this to a sequential signed expression, and then chaining this to sequential written expression).

As she continues to support Felix in making connections between ASL, English, and Spanish, Suzie begins to link ASL vocabulary directly to English and Spanish vocabulary through fingerspelling (e.g., [W-H-A-L-E]/[B-A-L-L-E-N-A]) and words on the board (e.g., "[WHALE]/[BALLENA]-[SWIM]/[NADA]-[UNDER]/[BAJO]-[SEA/MAR]"). She

might also discuss unshared linguistic properties of the languages, such as the use of articles in the written languages that are not present in ASL (e.g., "[A]-[WHALE]-[SWIMS]-[UNDER]-[THE]-[SEA]" AND "[UNA]-[BALLENA]-[NADA]-[BAJO]-[EL]-[MAR]"). Suzie could then prompt Felix and the other students to express the written ideas once again in ASL to demonstrate their metalinguistic knowledge of simultaneous and sequential expressions. Because of Felix's need for expanded linguistic skills that allow for higher levels of engagement in school and home interactions, Suzie understands the importance of providing regular opportunities for Felix to use ASL, Spanish, and English. Felix actively incorporates properties from ASL, Spanish, and English into a single, integrated linguistic repertoire, and Suzie supports the development of metalinguistic knowledge through explicit discussion of the similarities and differences of linguistic properties.

7.2.3. Communicating with External Audiences

The act of composing a written text or signed video for people outside of the classroom, or of reading a text or viewing a video from an external audience, requires additional skills. One needs to consider who the communication is intended for and what languages they know, how the message is being shared (format/mode), and why the communication is occurring (purpose). Part of the composing process (of signed, spoken, or written languages) is the revision and refinement of ideas and the use of specific linguistic features to match the audience, purpose, and publication format for one's ideas. Each of these variables (audience, format, purpose) has an impact on the language resources one deploys for communication to be successful. Consider, for example, the different communicative resources of an international deaf audience with limited ASL and English knowledge versus a hearing monolingual group of English speakers. In Suzie's class, she makes sure to expose her students to external audiences that reflect the linguistic diversity of their communities and the world. She is mindful that her course resources (e.g., reading materials and videos), as well as her composing assignments (with specified external audiences), should be varied so that Felix and his classmates can experiment with languages, modalities, and variations that differ based on purpose, audience, and publication format. Her goal is to expand students' communication resources to facilitate their ability to more flexibly receive/express ideas with external audiences.

After Felix joins her class, Suzie learns that Council de Manos—a Latinx Deaf, DeafBlind, DeafDisabled, Hard of Hearing, and Late Deafened organization in the United States—is collecting stories to preserve and celebrate cultures, values, and heritage. During social studies class, Suzie shares what she has learned with Felix, and he expresses interest in contributing a story about his life. Suzie uses videos and texts of deaf people sharing their stories on the Council de Manos's website as mentor texts. Some of the texts/videos are entirely in Lengua de Señas Mexicana (LSM) [Mexican Sign Language], some incorporate ASL and Spanish, and some incorporate Spanish and English. With the aim of addressing the ASL standard, "Compare and contrast stories in the same genre on their approaches to similar themes and topics", Suzie asks students to analyze the purpose of these texts/videos and identify potential audiences of these texts/videos. Suzie points out genre-specific language uses in the texts/videos and explains that the authors are recounting their experiences. For example, she identifies that narrating past experiences requires specific linguistic features, such as first-person pronouns ("I") and time markers (e.g., 10 years ago, in December, yesterday), which are heavily used in the mentor texts.

Felix participates as the lead author in a collaborative and interactive composition with his classmates and teachers. Felix and the other students understand that the external audience receiving the communicated message will be Latinx deaf people who are likely to know ASL, English, Spanish, and other named signed languages in Latin America such as LSM. They decide that a signed video accompanied by Spanish and English text would make his story accessible to his target audience. Felix shares his ideas, and the class works together to organize and express the ideas in both signed language and written language. While interacting with one another to compose Felix's story, each

student's idiolect continues to be welcomed and validated in the shared space, and there is a collective commitment to achieving a shared understanding through flexible and creative communication involving unrestricted use of any semiotic and linguistic resources at their disposal.

While composing, Suzie steers students' attention towards making conscious choices about language use based on the purpose/genre, audience, and publication format of Felix's story. As students support each other in revision and refinement of the composed video, Suzie continues to build their metalinguistic knowledge by moving back and forth between simultaneous and sequential signed expression of meaning units, making connections between synonyms and phrases, and making linguistic comparisons across languages. Felix's final publication is mostly in ASL with some inclusion of LSM. For key words such as soccer and food, both English and Spanish text are used in the video (i.e., [soccer]/[fútbol] and [food]/[comida]). Through this project, Felix and his classmates are able to maximize the use of their linguistic resources during collaborative writing, while also expanding their linguistic knowledge through the analysis of mentor texts and through the refinement of their expressed ideas for an external audience and meaningful purpose.

7.2.4. Critically Analyzing Social Context

As evident from the thoughtful and strategic ways that Suzie approached language and content learning in her classroom, Suzie was committed to providing an accessible language environment for her deaf students, and Felix specifically, through signed language. She intentionally did not use ASL or other named languages without first coming to a shared understanding through the use of semiotic resources or Felix's initial communication system. By embracing and incorporating Felix's initial system into the classroom discourse, Felix felt empowered to use his existing communication repertoire to participate as an active and engaged class member. Suzie was careful to link shared or understood concepts to simultaneous signed expression, acknowledging this to be a highly accessible form of ASL for acquisition due to signing multiple meaning units in a 3-D spatial sign, which tends to be higher in iconicity and imagery.

Furthermore, Suzie countered deficit-based views of ASL and other minoritized languages such as Spanish by supporting the legitimacy, development, and use of ASL and Spanish in the classroom. Suzie also engaged her students in the interrogation of linguistic hierarchies through discussions about the value of all languages and expressions. Her students were exposed to various external audiences (e.g., persons who do and do not share their identities and idiolects). Suzie provided a meaningful learning experience for her students, and Felix in particular, through the project for Council de Manos and worked towards creating equitable services, systems, and structures.

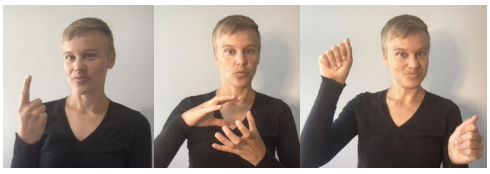
7.3. Gabrielle

We have just provided an in-depth example of how Suzie supported Felix through instructional decisions outlined in the TFDE. Felix is one student in the class and, naturally, there are other students with their own idiolects. In this section, we broaden the application of the model to another student in Suzie's class: Gabrielle. Gabrielle's parents often use sequential signed expression due to the shared linguistic properties between sequentially signed ASL and spoken/written English, and due to their limited linguistic knowledge of simultaneous expression. Gabrielle is comfortable using ASL, as well as English for her written expressions; she can also speak some English words.

In language arts class, Suzie engages students in a lesson to address the following ASL standard: "Integrate information from several texts on the same topic in order to narrate about the subject knowledgeably." Suzie shows a few informational videos on making pizzas. The first video is of a pizza chef showing each step involved in making pizza. Each step is narrated through spoken English and an ASL interpreter in the corner of the screen. The second video is an interview with two deaf owners of a pizza restaurant called Mozzeria. They were asked in ASL to explain how they made their legendary pizza, the

"Margherita". The third video shows each ingredient that goes into making pizzas, along with their English labels. The class considers the purposes and intended audiences of the videos. They work to understand genre-specific language, such as that of an instructional video versus that of an interview, and what, why, and how languages are being used to relay meaning.

Suzie then asks students to integrate what they have learned from the videos into a signed description of how to make a pizza. Suzie explains that they will then bake a pizza at home by sharing their descriptions with their families (who will be asked to follow their children's instructions). The students practice explaining how to make pizzas to their families. First, they synthesize and recap the information they have learned from the videos in 3-D spatial sign or simultaneous expression. Simultaneous expression is an intentional choice of Suzie's to ensure access in terms of understanding the concepts through language, especially for students such as Felix who are acquiring ASL. Suzie models simultaneous expression for her students and connects the language to pictures and handheld manipulatives to further ground the language in concrete ways. As seen in Example H–J, Suzie has the class sign together, "[FIRST]-[DOUGH]-[SPREAD IT INTO A CIRCLE]", "[SECOND]-[TOMATO SAUCE]-[ADD IT TO THE TOP OF THE DOUGH]", "[THIRD]-[CHEESE]-[PUT IT ON THE TOP OF THE TOMATO SAUCE]."



Example H. [FIRST]-[DOUGH]-[SPREAD IT INTO A CIRCLE].

Example I. [SECOND]-[TOMATO SAUCE]-[ADD IT TO THE TOP OF THE DOUGH].

Example J. [THIRD]-[CHEESE]-[PUT IT ON THE TOP OF THE TOMATO SAUCE].

Keeping in mind that Gabrielle's family is more familiar with sequential expression, Suzie intentionally builds in metalinguistic knowledge of ASL linguistic variation. She makes connections between simultaneous and sequential signed expressions and points out these differences to her students. Together, they combine a sequential signed expression with a simultaneous expression such as, "[FIRST]-[SPREAD]-[DOUGH]-[CIRCLE]-[SPREAD DOUGH INTO A CIRCLE]", "[SECOND]-[ADD]-[TOMATO]-[SAUCE]-[ON]-[TOP]-[DOUGH]-[ADD TOMATO SAUCE ON THE TOP OF THE DOUGH]", "[THIRD]-[PUT]-[CHEESE]-[ON]-[TOP]-[TOMATO]-[SAUCE]-[PUT CHEESE ON THE TOP OF THE TOMATO SAUCE]." Gabrielle's knowledge of and comfort with ASL linguistic variation increases as she practices producing multiple meaning units simultaneously and sequentially. With a similar focus to the one maintained for Felix in terms of being able to

connect with his family, Suzie provides some Spanish equivalents of key vocabulary, such as "[tomato]-[sauce]"/"[salsa]-[de]-[tomate]" and "[cheese]"/"[queso]".

7.4. Pitfalls and Solutions: What If Suzie Was Mary?

What if Suzie was not teaching Felix, Gabrielle, and the other students, but instead there was a teacher named Mary? Additionally, what if Mary used spoken/written English and had limited exposure to ASL (from taking one semester of ASL in college) and had no knowledge of other named languages? What if Mary said in English, "How are you?" to Felix, and when she saw he was puzzled she did not have the linguistic tools to communicate differently with him? What about Gabrielle? She might understand a little more of what Mary could communicate to her in spoken English, but it would take a tremendous amount of effort on her part, and she would still likely struggle to fill in what she missed due to her restricted auditory access and speech comprehension. What if there was also a hard of hearing student in the same class who was able to access even more, but not all, of Mary's expressions in spoken English? Because of Mary's reliance on spoken language for communication, she is most assuredly creating asymmetries in language access for her students, as some students have greater access than others.

Individuals are differentially positioned with access to languages that carry power. Hearing children can physically access spoken language no matter where they are, even if it is not the spoken language that they know or use at home. Deaf children, on the other hand, have highly variable access to spoken language, even with listening devices such as hearing aids and cochlear implants. Signed language is the only language modality that is fully accessible at all times to sighted deaf children in the same ways spoken language is accessible to hearing children. When there are limiting interactions with spoken language in the classroom, asymmetries in accessing communication learning are created.

Access asymmetries can be addressed by centralizing signed language in the education of deaf students, even if some students do not know or use signed language at the time. By enacting instructional decisions as presented in the TFDE to reach a shared understanding, the teacher ensures that no students are lost in communication they do not understand (whether spoken or signed); rather, there is a concerted effort to use all linguistic and semiotic resources to achieve comprehension of educational concepts and then to link understood concepts to fully accessible language (in this case signed language). Further, by welcoming students to use their existing linguistic repertoire (including speech) to express meaning in class, while also enacting translanguaging pedagogies to purposefully expand their linguistic resources and linguistic flexibility, all students are seen as valued members of the class and come to view their classmates as equally valued. Over time, students become more resilient users of languages, language variations, and modalities (sign, writing, and for some, speech) and develop tools to communicate successfully with those around them. Language asymmetries will eventually diminish. However, how can Mary enact the TFDE as a model and guide for her students when her own linguistic resources are limited?

Individuals' competence and flexibility with communication in the classroom can lead to translanguaging practices being restricted, channeled, or expanded (Iturriaga and Young 2022). When there are constraints on using whole linguistic repertoires to make meaning among communication partners, translanguaging is "restricted". When communication partners make choices that are guided by linguistic hierarchies centering English, translanguaging is "channeled" to focus solely on the use of English. When communication partners freely use all linguistic resources at their disposal to make meaning, translanguaging is "expanded", leading to the widening of repertoires during communication.

In the world outside of the classroom, interactions occur with various people where translanguaging is restricted, channeled, or expanded. However, within the classroom when developing an understanding of new concepts during learning activities, expanded translanguaging practices are paramount. Iturriaga and Young's (2022) study noted that deaf students' translanguaging practices were expanded when having direct communica-

tion with signing deaf people, signing hearing staff, and/or non-signing hearing tutors meditated by signing support staff. In these interactions, deaf students used various semiotic and linguistic resources creatively and flexibly to facilitate shared understanding, which was also equally reciprocated by their communication partners. Conversely, when communication partners such as teachers are not competent or flexible users of signed language, it is challenging for deaf students to widen their repertoires, which can lead to restricted or channeled translanguaging practices. Swanwick et al. (2022) explain,

> If we understand translanguaging to be a natural component of bilingual classroom pedagogy that is hospitable to the full communicative repertoires of learners, meaning-making practices associated with this framework that include the integration of different modes in classroom communication need to be problematized in the context of deaf education. Translanguaging in this context does not guarantee an inclusive experience for learners, and indeed can give rise to confusion and a fragmented language experience if the semiotic resources are not sufficiently coordinated in both space and time around the sensorial asymmetries of the interlocutors. At best, translanguaging can provide the 'understructure' (Prada 2019) for inclusive practices that then need to be enacted with an understanding of the sensory conditions of the interaction. (p. 13)

In Mary's case, we identify some of her interactions as "restricted" and "channeled". Her limited ASL resources and heavy reliance on spoken language restrict communication between Mary and her students and force many interactions to occur through English. Mary is in a difficult situation in which she is both (1) the source of causing inequitable language experiences among her students, two of whom are Felix and Gabrielle, and (2) the source of ensuring equitable access for all of the students in her classroom. It is critical that Mary can identify and strategically address the asymmetries that exist, even if she is part of the reason asymmetries are occurring in the first place.

As Mary recognizes the inequitable learning environment she has created due to having limited linguistic resources, she commits to taking more ASL classes to improve her signing. This does not mean that Mary should wait to enact translanguaging pedagogy. Waiting would cause further detriment to her current students' language development and learning. Rather, it is possible for Mary to create inclusive spaces for students to leverage what they know, even while she is limited in her own ASL expression. Mary must innovate ways to effectively communicate with students immediately, such as primarily using semiotic resources that are visually oriented. Mary can role play, use drawing, show pictures/videos, use conceptually accurate gestures, or even invite more flexible language users, such as deaf interpreters, to mediate communication either through speech-to-text software or other hearing interpreters. In the meantime, Mary is committed to developing connections with deaf communities, having meaningful interactions with signing deaf adults, and working diligently towards improving her signing skills.

In addition to her conscious communication choices to support Felix and Gabrielle in the classroom, Mary can critically interrogate the social context that allowed this circumstance to happen. For one, asymmetries in language access leading to language deprivation should not be tolerated in language learning spaces. To combat systemic inequities, Mary can advocate for her deaf students to be around other deaf peers and adults who use signed language to ensure whole child development (e.g., mental and emotional health, identity development, shared access needs, and shared experiences). Mary can also advocate for quality interpreters within and outside of her classroom while recognizing that interpreters only provide partial access (Caselli et al. 2020). Mary can share resources with her students' families about what deaf communities have to offer, such as free signing classes, deaf mentors, deaf organizations, and deaf events. Through her commitment to act against inequity, despite not knowing ASL yet, Mary can uphold the spirit of the critical translanguaging stance.

8. Future Directions: What It Takes

To provide direction to teachers who are considering translanguaging pedagogy, García and colleagues (García et al. 2017) propose three core components: taking up a translanguaging *stance*, purposeful translanguaging *design* for instruction and assessment, and engaging in translanguaging *shifts* to respond to students' learning needs. First, there needs to be an ideological shift in how teachers understand and perceive the function of language in learning toward recognizing that all linguistic resources, in all their diversity, are crucial to meaning making. This includes embracing the "inside view" of language and validating each person's individual communicative repertoire. Second, teachers must intentionally design spaces for translanguaging, providing students with meaningful learning activities, such as the Council de Manos storytelling project, that draw upon their full linguistic repertoire for making meaning and that validate students' dynamically lingual identities (Flores 2013). Importantly, in their design, these translanguaging pedagogies must also critically consider social context. This includes challenging monolingual biases, language hierarchies, and the policing of language boundaries, while also ensuring that all students can access and participate in learning activities. Third and finally, teachers must actively engage in translanguaging shifts with their students to support moment-to-moment meaning making. There should be consistent effort toward increasing students' linguistic flexibility and making linguistic connections across initial communication systems, languages, language variations, and modalities, while also continuing to privilege signed language(s). We propose that the TFDE is a model that can guide the application of translanguaging pedagogy in classrooms that serve deaf students in ways that support these three components. As a next step, we call upon educators and researchers to partner in the implementation of the framework (1) to further illuminate its use through case studies and/or analyses of classroom dialogue and (2) to study the impact of the framework in educational settings. Following further study, there will be a need for professional development programs that assist schools toward implementation in specific domains or wider implementation across diverse contexts.

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Note

[1] Signed expressions are written using capitalized letters. Brackets are used to encapsulate the meaning of a single signed or spoken expression, and dashes between brackets are used to show how expressions are strung together.

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