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Introduction

In the U.S. and Canada, speech-language pathologists (SLPs) are professionals who evaluate, diagnose, and treat communication and swallowing disorders in people across the lifespan (ASHA, 2023; Bureau of Labor Statistics, 2022; Holt, 2022; Lagacé et al., n.d.). Referred to as SLPs hereinafter, their work includes assessing and treating a gamut of speech, language, and swallowing disorders, in addition to cognitive and/or social impairments associated with communication. Examples of communication impairments include expressive and/or receptive language disorder, speech sounds disorders, and communication challenges associated with Down’s Syndrome, autism, and learning disabilities.

Pediatric SLPs working with young children work in early intervention, private clinics, home health settings, and public schools. They play a key role in the early identification and assessment of young children. To make adequate assessment and treatment decisions, they must consider children’s linguistic and cultural backgrounds. This is particularly evident for racialized emergent bilinguals (REBs), as they are more likely to experience lower quality treatment (Pope et al., 2022) and/or misrepresentation in special education services due to assessment bias (Cycyk et al., 2022b; Nelson & Wilson, 2021), limited SLP training (Suswaram, 2023), and a lack of consideration of children’s linguistic backgrounds (e.g., Sullivan & Artiles, 2011). In this brief, REBs are defined as Black, Latine, Indigenous, Asian, and other children of color who speak two or more languages, with various degrees of fluency, depending on the context (Soto-Boykin et al., 2023; Cioè-Pena, 2017). Presently, the bulk of SLPs are monolingual, and most receive very limited training on valid assessment and treatments for children and families who are linguistically and culturally diverse (e.g., Guiberson & Atkins, 2012; Parveen & Santhanam, 2021; Cycyk et al, 2022a; Suswaram et al., 2023). This lack of limited training is
likely to contribute to ongoing disparities for children who are REBs. The purpose of this brief is to evaluate how prospective SLPs are being prepared to validly evaluate and treat children who are REBs by comparing SLPs’ educational requirements in the United States and Canada.

Demographics of Pediatric SLPs and the Populations They Serve

Both in the U.S. and Canada, the SLP workforce have limited diversity, as most SLPs are White and monolingual. According to recent data from the American Speech-Language Hearing Association (ASHA), an estimated 91.6% to 91.8% of the SLP population in the U.S. identified as White (ASHA, 2022; Millar et al., 2023; Narayanan & Ramsdell, 2022). U.S. SLPs from all other racial/ethnic categories made up 8.4% (i.e., Black, Latine, Indigenous, Asian, etc.; Millar et al., 2023; Narayanan & Ramsdell, 2022). Similar trends can be seen in Canada where it is estimated that only about 9.4% of SLPs and audiologists are not White (GAAROA, 2020).

![Racial Backgrounds of SLPs in the U.S.](image1)

![Racial Backgrounds of SLPs in Canada](image2)

Context of Multilingualism in the U.S. and Canada

This uniformity in SLPs is mirrored in government policies on languages in the US and Canada. The history of multilingualism in the U.S. has been contentious, with historic
English-only policies despite the country not having an official language (Nieto, 2002). Arizona continues to be the only state with an English-only law currently (Butfilovsky & Gumina, 2020). The linguistic context of Canada differs slightly as Canada has two official languages at the federal level (English and French). Despite this approach, provinces and territories are tasked with operationalizing this policy at provincial and local levels with three provinces (Alberta, Saskatchewan, and Québec) restricting the use of minority languages in certain contexts (Hudon, 2022). Such perspectives of language dominance are part of the reason why we see linguistic discrepancies between children and SLPs (Brea-Spahn & Bauler, 2023; Simon-Cereijido, 2018; Soto-Boykin et al., 2023).

**Gaps Between SLPs’ and Children’s Linguistic Backgrounds**

There is currently a mismatch between SLPs’ linguistic backgrounds and the children they serve. In the United States, approximately 14,958 bilingual SLPs are tasked with servicing between 3.4 and 6.8 million clients who speak languages other than English (Narayanan & Ramsdell, 2022). While in Canada there is little data on the languages spoken by SLPs at the national level, one study identified a shortage of multilingual SLPs to serve an estimated 6.1 million people whose first language is neither English nor French (D’Souza et al., 2012). Presently, 1 in 5 Canadian children ages 0-9 use at least two or more languages at home while in the US, about 1 in 3 of all children in public schools are bilingual (Schott et al., 2022; Migration Policy Institute, 2019).

Such marked linguistic differences between children and SLPs are of great concern given the rates of disability among multilingual children. In the U.S. the National Center for Education Statistics (NCES, 2020) estimates that 16.1% of the 5 million English Language Learners (or
800,600 students) in the United States are disabled. While in Canada, it is difficult to estimate the number of multilingual children with suspected or confirmed disabilities at the federal level, 8%-12% of preschoolers are predicted to have speech or language issues (Filkow, 2020). To address the diverse range of languages spoken, it is also important to note that being a bilingual SLP does not guarantee proficiency in the same languages as a child (i.e., a French-English bilingual SLP being tasked with an English-Bengali speaking child). Hence, further training around bilingualism for assessing and treating REBs is warranted across the workforce.

Impact of Lack of a Diverse SLP Workforce on Children who are Bilingual

Presently, Black, Latine, Indigenous, and children of color who are bilingual are misrepresented in special education (Kangas, 2017; Robinson & Norton, 2019). This misrepresentation stems from over or under referrals to special education or related services, use of standardized assessments that are not linguistically or culturally valid, and misconceptions about bilingualism (Anaya, et al., 2018; Paradis, 2016; Paz et al., 2023; Pesco et al., 2016; Robinson & Norton, 2019)

Over referrals usually happen when children’s typical bilingual development is confused with a communication disorder (Guiberson, 2013). On the other hand, under-referrals occur when providers wait several years before determining if a child has a disability, or when they attribute a child’s difficulties to learning English (e.g., Artiles et al., 2010). These misrepresentations may also be a result of assessment errors as standardized assessments usually compare monolinguals to bilinguals, and norms are based on monolingual children, even when assessments are available in languages other than English (Paradis, 2016; Garivaldo & Fabiano-Smith, 2023). For example, the Peabody Picture Vocabulary Test (PPVT) in Spanish is
normed on Spanish monolinguals rather than English-Spanish bilinguals (Wood & Schatschneider, 2019). When an assessment is used on a population that was not included in its development, the assessment results are invalid.

Once bilingual children are identified as having a disability, there is a pervasive misconception that a child’s disability needs more urgent attention than their bilingual development (Kay-Raining Bird et al., 2016). For example, in a study by Soto-Boykin et al. (2023), the results indicated that most state-policies do not explicitly require that children with disabilities who are bilingual have access to bilingual education. Similar results were seen in studies which analyzed policy data from five sites in the United States, Canada, the Netherlands, and the United Kingdom; these studies identified numerous barriers for bilingual children with disabilities to develop or sustain their bilingualism as their disabilities were seen as priority over their language needs (see Kay-Raining Bird et al., 2016; Marinova-Todd et al., 2016; Pesco et al., 2016; Scherba de Valenzuela et al., 2016 ). This misrepresentation in special education, combined with policies that do not address bilingualism for children with disabilities, result in these children being excluded from opportunities to develop bilingually, which reduces their opportunities to engage with their families and communities.

**Research-supported practices for SLPs supporting racialized emergent bilinguals**

Research-supported practices for assessing and treating children with suspected or identified disabilities who are bilingual include:

- **Screenings:** should gather information from multiple sources (parent input, educator input when relevant, observations, informal measures) and time periods to determine how a child is communicating compared to their peers in the same community, whether family
members have concerns, the amount of time a child has had experience in English and their home language, and any relevant medical or social history (McLeod et al., 2017). Furthermore, instead of “waiting and seeing” how children fare in their environment for several years before intervening, research supports the “watch and seeing” approach where SLPs are collaborating with families and educators to determine children’s development over time, and to make evaluation decisions accordingly. (Cattani et al., 2014).

● **Assessment:** must help SLPs to rule out linguistic differences vs. language disorders due to how two or more languages may influence or skew assessment outcomes. McLeod and colleagues (2017) outline three areas that SLPs must be knowledgeable in when assessing bilingual children, especially children who do not speak the same language(s) as the SLP:

  ○ how languages abilities may vary across languages (i.e., having receptive and expressive language in Spanish but receptive language in English);
  ○ how the home language might influence performance in the second language (i.e., phonological processes from one language being expressed in the other language where they may not be considered age-typical);
  ○ And how individual differences can lead to different results in standardized assessments (i.e., due to bias or translations of popular assessments like the *PPVT* that are not tested with bilingual children).

Although newer and more valid assessment tools are being developed, there are still not enough assessment tools that can meet all the linguistic combinations possible, especially among small but emerging language communities (i.e., Haitian Creole in Montréal; Mayan languages in Southern California). Thus, incoming SLPs must know how to
assess multilingual children using ecologically valid informal assessment measures and other non-standardized evaluations (Pieretti & Roseberry-McKibbin, 2016). Some examples of these alternative assessments include:

- Dynamic Assessments which are an umbrella term of assessment strategies that may be more accurate for diagnosing language impairments in bilingual children as they include elements of testing-teaching-retesting various milestones of language development and judging the child's ability to modify language via various stimuli (Hunt et al., 2022; Orellana et al., 2019; Peña et al., 2014; Przymus & Alvarado, 2019).

- Speech-language sampling is another indicator for multilingual children. This assessment practice collects a conversational language sample in the child’s first language and any other languages they come in contact with to assess the child's speaking ability in different contexts (De Lamo White & Jin, 2011; Teoh et al., 2018)

- Instruments or tests that do not rely on formal language skills may also provide data for identifying any potential language disorder such as information about the language sounds v the language sounds that a child can produce (Cowan et al., 2023). One primary example includes nonword repetition tasks which provide information about a bilingual's language sounds which may influence performance in another language (Gibson et al., 2015; Schwob et al., 2021).

- The use of interpreters and parent input may also provide valuable data to help with assessing a child’s language capacities in a language that is not spoken by the SLP (McLeod et al., 2017; Hopf et al., 2021).
• **Intervention:** Based on recommendations from the International Expert Panel on Multilingual Children's Speech (see McLeod et al., 2017 & Verdon et al., 2015), SLPs should be taught how to use intervention strategies that are culturally responsive when working with multilingual children. Culturally responsive speech-language therapy practices are those that take into account all of a child's and their family's cultural perspectives, beliefs, and values and use them in all parts of therapy, from evaluation to intervention (Hyter & Salas-Provance, 2019, p. 7). This can be done by making changes to the activities and tools of the intervention (Albin et al., 2022; Ogletree et al., 2022). Such strategies have been shown to help children and families feel more connected to therapy goals, methods, and results (Albin et al., 2022). To this extent, there are many ways to use interventions that are culturally responsive as these practices are context-dependent because they change based on the family and linguistic community(ies) of the child (Hyter, 2022; Ogletree et al., 2022). Secondly, it is important that services should be done via a bilingual service delivery that includes interpreters and parents. It’s important to note that research-supported practices recommend that parents are not used as the interpreter during therapy (Newburry et al, 2020). Instead, professional interpreters should be used. Finally, the home language should never be modified for treatment or education; parents should be encouraged to communicate in their native language or whichever language they know best as input quality affects language achievement over time (Newburry et al., 2020).

**In addition to the technical skills needed, research also indicates that SLPs need adequate attitudes and dispositions to work with REBs:**
Even though there are many cognitive, social, and academic benefits attributed to being bilingual (see Byers-Heinlein & Lew-Williams; Bialystok, 2018), SLPs and schools continue to express negative ideas about developing bilingualism among REBs. One recurring notion includes discouraging parents of REBs with suspected or confirmed disabilities to stop speaking their home language and use the second language instead (Kay-Raining Bird et al., 2016; Newburry et al., 2020; Paz et al., 2023; Simon-Cereijido, 2018). Hence, understanding how socioeconomic policies and societal views impact language development as this can impact SLP approaches to REBs with suspected or confirmed impairments. Knowledge in these areas may also help SLPs to learn about the diverse ways in which social and structural issues influence the communication of different communities. The inclusion of this in the education and clinical training of pre-service SLPs would then be applicable to all components of therapy.

For this reason, it is critical that SLPs learn and adopt a global ethic for their practice which “focuses on fairness and justice that affects people all over the world” (Hyter, 2022). This can be achieved through the teaching of concepts like cultural humility and anti-racism in their professional training (see Brea-Spahn & Bauler, 2023; Soto-Boykin, et al., 2023). Hyter (2022) states that cultural humility is "the recognition that other cultures have values, beliefs, and worldviews that are just as valid and important as one's own.” Cultural humility is a skill that is built through continuous critical self-reflection so training pre-service SLPs to be competent in this would serve as a foundation stone for their future practice. Such reflective techniques are argued to help SLPs to better adapt to changes in our society (Caty et al., 2016). By taking interdisciplinary classes that help develop this perspective, SLPs become aware of their own cultural histories, beliefs, values, biases, and world perspectives, as well as those of others (Hyter, 2022).
Secondly, racism has been shown to be a social determinant of health and education (ACSLPA, 2022; Kulkarni, 2020; Yu et al., 2022). The Alberta College of Speech-Language Pathologists and Audiologists (ACSLPA, 2022) recommends that SLPs implement anti-racist practices to improve services to underrepresented populations by developing: a broad base of experiential, practical, and Indigenous knowledge, along with factual proof from traditional literature, while keeping in mind that the client is usually the most dependable and accurate source of experiential knowledge; and learning about biological and genetic factors that affect health, as well as the social, political, and economic factors that affect the health of each person, and the use of anti-oppressive principles in practice. Survey studies have shown that the teaching of such practices are useful for preparing SLPs to work with culturally and linguistically diverse communities (Narayanan & Ramsdell, 2022; Parveen & Santhanam, 2021; Suswaram et al., 2022). SLP education programs can teach this in several ways, such as through specific coursework which can be applied when working with REBs during clinical training (Hayes et al., 2022;).

Both the United States and Canada are experiencing similar demographic shifts in their child population, have similar cultural and linguistic discrepancies between SLPs and children, and have systematic approaches to preparing SLPs to work with children with communication needs. Based on the literature reviewed above, there is a need for culturally responsive SLP practices that can better serve REBs. As a response to this, researchers have recommended tutorials for SLP services rooted in social justice frameworks that are supported by language science (e.g., Castillas-Earls et al., 2020; Hernandez et al., 2023; McLeod et al., 2017; Pryzmys & Alvarado, 2019). Despite ongoing efforts, survey studies continue to demonstrate that SLPs both in the US and Canada continue to feel underprepared to work with culturally and
linguistically minoritized clients (Cycyk et al., 2022a; D’Souza et al., 2012; Guiberson & Atkins, 2012; Hayes et al., 2022; Parveen & Santhanam, 2021; Narayanan & Ramsdell, 2022; Suswaram et al., 2023; Unger et al., 2021). Hence, this is an initial policy review that will analyze pre-service SLP curricular requirements in both the U.S. and Canadian to determine if these requirements match best practices for assessing and servicing REBs.

**Policy Review**

**Method**

*SLP competencies for serving emergent bilinguals.* Two articles were used to identify the current competencies for successfully implementing culturally responsive assessment and treatment of REBs with suspected or identified communication disorders. This included the Ecological Validity Framework (EVF) which was adapted to evaluate the intervention adaptations for families of multilingual children (Alibin et al., 2022) and the bilingual special education policy framework by Soto-Boykin and colleagues (2023) which evaluated how bilingual children are addressed in various areas that impact the services they receive. Both sets of competencies were combined and adapted to evaluate the extent to which pre-service SLPs’ coursework requirements in Canada and the U.S. incorporated these competencies of culturally responsive assessment and treatment into their curricular standards.

The EVF will be reviewed first. The EVF was created to guide how psychological treatments could be adapted for different culture groups. Based on this, Albin and colleagues (2023) used this method to examine what aspects of parent-led early speech interventions are culturally adapted in prominent research. This framework has eight indicators: the dimensions of
language, persons, metaphors, content, concepts, goals, method, and context. A description of each of these dimensions is presented below in Table 1.

EVF is a content model first used to figure out what parts of early communication treatments that parents may do are culturally adapted. Since parents and caregivers are crucial for the communication development of a child, this framework proved as a useful start. Nonetheless, factors impact communication development within the SLP context. To understand this, the incorporation of broader policy-focused frameworks for bilinguals with suspected or diagnosed disabilities was warranted.

**Table 1. Ecological Validity Framework (EVF) definitions used by Albin & colleagues (2023).**

<table>
<thead>
<tr>
<th>EVF Criteria Concept</th>
<th>Questions asked for data extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Do the authors discuss, or culturally adapt based on, language aspects of the intervention? Includes translation and other features of language (e.g., oral communication, written communication, specific jargon).</td>
</tr>
<tr>
<td>Persons</td>
<td>Do the authors discuss, or culturally adapt based on, (a) structural considerations, such as cultural, ethnic, and/or racial similarities and differences within the client-therapist dyad; or (b) interactional considerations (e.g., client or therapist expectations)?</td>
</tr>
<tr>
<td>Metaphors</td>
<td>Do the authors discuss, or culturally adapt based on, verbal (e.g., sayings, idioms) and/or visual metaphors (e.g., photos, stimuli, advertising), or metaphors outside of the intervention itself (e.g., artwork in clinic)?</td>
</tr>
<tr>
<td>Content</td>
<td>Do the authors discuss, or culturally adapt based on, the values, customs, and/or traditions of their client? Additionally, (a) did the authors provide descriptive information on the values, customs, and traditions of this population; and (b) did the authors describe any cultural adaptation based on this content information?</td>
</tr>
<tr>
<td>Concepts</td>
<td>Do the authors discuss, or culturally adapt based on, the theoretical underpinnings of their intervention (e.g., theories or principles, such as individual vs. collectivist cultures)?</td>
</tr>
<tr>
<td>Goals</td>
<td>Do the authors discuss adaptation of intervention goals and/or describe whether intervention goals required cultural adaptation for this group before or during intervention implementation (e.g., adapt goals a priori or during the study)?</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Methods</td>
<td>Do the authors culturally adapt the methods in their study or justify why elements did not need to be adapted (e.g., adding more sessions, adding a focus group, adding visuals)? This section refers to methodological elements not captured in the seven other sections to avoid repetition of concepts.</td>
</tr>
<tr>
<td>Context</td>
<td>Do the authors consider the cultural context when implementing this intervention? Consider broad political, social, and/or environmental factors (e.g., availability of social supports, phase of migration, acculturative stress). This criterion addresses the social, economic, and political considerations for the intervention (e.g., transportation or childcare barriers; individual vs. group therapy).</td>
</tr>
</tbody>
</table>

Note: Author refers to researchers publishing about the cultural adaptations for families from multilingual backgrounds.

The policy framework developed and used by Soto-Boykin and colleagues (2023) was used to incorporate broader elements of service delivery. The goal of this review piece was to analyze state-level policies in the U.S. that focus on providing speech-language therapy and special education to REBs with confirmed or suspected disabilities. To do this, researchers analyzed the extent to which bilingual children are mentioned, the words used to describe them, other terms used related to equity and diversity, the purpose of the policies (e.g., eligibility, assessment, intervention), the specific subtopic of the policy, whether treatment once children were eligible was addressed, whether bilingual education supports are noted, type of bilingual education model(s) proposed, and the orientations toward bilingualism from various policy documents.
By combining elements from these two frameworks, as well as from extant research on bilingual assessment and intervention, nine SLP competencies were operationalized to compare the curricular standards to these competencies (Table 2).

Table 2.

*SLP Competencies for Providing Culturally Responsive Assessments and Interventions to Racialized Emergent Bilinguals with Suspected or Identified Communication Disorders.*

<table>
<thead>
<tr>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Treats bilingualism as an asset, and not a cause for a communication disorder</td>
</tr>
<tr>
<td>2. Assesses children in their home language and dominant language(s) using different measures (e.g., parent input, observation, dynamic assessment)</td>
</tr>
<tr>
<td>3. Is aware of how bias impacts assessment selection and intervention selection</td>
</tr>
<tr>
<td>4. Uses interpreters to support assessment and intervention as needed</td>
</tr>
<tr>
<td>5. Provides intervention in ways that support the home language, even when the SLP provider does not speak the language</td>
</tr>
<tr>
<td>6. Implements culturally sustaining practices when conducting assessments and delivering interventions in ways that protect and preserve the cultural and linguistic identities of children and families served</td>
</tr>
<tr>
<td>7. Engage families who do not speak the dominant language by educating them about the value of bilingualism and typical bilingual development, and seeks their input when creating treatment plans and conducting assessments</td>
</tr>
<tr>
<td>8. Implements cultural humility when working with children and families who do not share the same cultural, linguistic, and/or racial background as you.</td>
</tr>
<tr>
<td>9. Has knowledge of the historical and contemporary way that racism, ableism, and other oppressions impact the experiences of children who are bilingual and/or racialized</td>
</tr>
</tbody>
</table>

**Documents reviewed.** The curricular standards for pre-service SLPs in Canada and the U.S. were reviewed to determine the extent to which they address the nine competencies for serving REBs detailed in Table 3 above. In the U.S, this was “The Standards for Accreditation of
Graduate Education Programs in Audiology and Speech-Language Pathology” issued by the Council on Academic Accreditation in Audiology and Speech-Language Pathology in the U.S. (CAA, 2023). In Canada, this was the “Interim Curriculum Standards for Audiology and Speech-Language Pathology” issued by Speech-Language & Audiology Canada (SAC, 2023).

Each document was read once entirely. Then, documents were read a second time using a line-by-line analysis, where excerpts were extracted for analysis. Each excerpt was read to search for specific line-items that referred to content relating to language, culture, or beliefs (i.e., terms such as bias) that SLPs should learn while in their graduate program.

A total of 83 line items were identified across both documents. This was reduced to 40 line items that were more specific about how this applied to various stages of the therapy process. To be included, line items had to:

1. mention how to include client culture at various stages with terms such as culture, socio-…,intersection, or derivations of such terms relating to cultural diversity (n = 17);
2. detail specific assessment or treatment procedures and practices (n = 5);
3. describe beliefs or personal retrospections that the SLP must have that facilitate equitable and inclusive practices (n = 7); and
4. specify how to include bi/multilingualism in therapy through terms such as linguistic diversity, bilingualism, multilingualism, language acquisition, first language or any derivation of such terms (n = 11).

A total of 43-line items did not meet the inclusion criteria of this initial review due to their ambiguity. Note: Due to the exploratory nature of this method, this brief focuses on counting the number of items currently provided by the guidance items rather than evaluating their quality.
Further studies are necessitated to evaluate the quality of both sets of standards which would require a more extensive team.

**Thematic Coding Analysis.** Using a thematic coding process, each line item that met inclusion criteria was transferred to an Excel spreadsheet. Then, each line item was coded according to the 9 indicators. This involved identifying and labeling specific language that matched the description of each indicator. If the line item matched with the indicator, the line item was scored accordingly: 1 – yes, meets indicator’s description or 0 – does not meet indicator’s description (e.g., “Identify and mitigate own biases, as they relate to the care of a client” [SAC, 2023] was given a 1 for meeting the description of indicators 3, 8, & 9 and a 0 for all other indicators). The analysis quantified each line item according to all of the 9 indicators since some line items described several aspects of therapy. Once this was completed, codes were re-read to confirm that line items matched the assigned indicator(s). The 40 line items issued by both countries yielded a total of 107 times in which they described one or more of the 9 indicators.

A country-by-country analysis resulted in Canadian guidance meeting one or more of the indicators a total of 52 times, with an average of 5.8 or ~6 statements per indicator. U.S. guidance resulted in line items meeting one or more of the indicators a total of 55 times, with an average of 6.1 or ~6 statements per indicator. Across both documents, there was an average of 5.9 or ~6 statements per indicator.

Due to the exploratory nature of this review, the average number of statements per indicator was used to evaluate how the guidance documents meet the description of the 9 indicators. Since the mean number of line items per indicator was six, six was used as a benchmark to evaluate current guidance documents by country. This resulted in the following
evaluation criteria: 0 indicated no statements met the respective indicator and needed to be addressed in future editions; 1-5 statements indicated that progress was being made on this indicator but still fell below the average number guidance items that could help SLPs achieve this indicator; 6 or more statements indicated that there were substantial guidance items that could help SLPs achieve this indicator. Since the goal was to analyze how both sets of curricular standards prepared SLPs to work with REBs, combined totals from the United States and Canada resulted in about 12 statements per indicator across both countries. This resulted in the following evaluation criteria: 0 indicated no statements met the respective indicator and needed to be addressed in future editions; 1-11 statements indicated that progress was being made on this indicator but still fell below the average number guidance items that could help SLPs achieve this indicator; 12 or more statements indicated that there were substantial guidance items that could help SLPs achieve this indicator. Note: All of these benchmarks are preliminary and future studies would be needed to validate this. See Table 3 below for a summary of these results.

Results

Final results demonstrated emerging patterns which can be seen in Table 3. The thematic analysis of standards revealed that both sets of standards provide substantial guidance to teach SLPs in four key areas (highlighted in green): awareness of how biases affect assessment and intervention selection; respecting different cultures and languages during assessments and treatments; working with diverse families with humility; and understanding how racism and other forms of discrimination affect bilingual and racialized children. These indicators in curricular requirements guide SLPs on how to service REBs effectively and inclusively. Nonetheless, both sets of guidelines can improve guidance on how to train SLPs in three key
areas (highlighted in yellow): use interpreters throughout the evaluation, assessment, and intervention processes; supporting the child's home language; and interacting with multilingual families. SLPs may not get enough training in these areas, making it difficult to assess and treat REBs with suspected or confirmed communication disorders. Finally, both sets of standards do not provide any guidance which assert that bilingualism is an asset and not a cause for communication disorder (highlighted in orange). While research confirms this to be true, policies and societal views which impact education, health, or other related services may continue perpetuating negative views on bilingualism (i.e., monolingual language laws or discrimination against certain language communities). Not addressing this positionality may continue to allow for discriminatory practices, beliefs, and attitudes to manifest within SLP services.

Table 3.

<table>
<thead>
<tr>
<th>Table of indicators: Professional skills that align with best practices for assessing and treating racialized emergent bilingual children with suspected/identified communication impairments</th>
<th>CA</th>
<th>US</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Treats bilingualism as an asset, and not a cause for a communication disorder</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Assesses children in their home language and dominant language(s) using different measures (e.g., parent input, observation, dynamic assessment)</td>
<td>9</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3. Is aware of how bias impacts assessment selection and intervention selection</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>4. Uses interpreters to support assessment and intervention as needed</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Statement</td>
<td>Orange</td>
<td>Yellow</td>
<td>Green</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>5. Provides intervention in ways that support the home language, even when the SLP provider does not speak the language.</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>6. Implements culturally sustaining practices when conducting assessments and delivering interventions (e.g., standardized and/or non-standardized assessments, language sampling; incorporation of music and other cultural elements in intervention).</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>7. Engage families who do not speak the dominant language by educating them about the value of bilingualism and typical bilingual development, and seeks their input when creating treatment plans and conducting assessments.</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>8. Implements culturally humility when working with children and families who do not share the same cultural, linguistic, and/or racial background as you.</td>
<td>6</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>9. Has knowledge of the historical and contemporary way that racism, ableism, and other oppressions impact the experiences of children who are bilingual and/or racialized.</td>
<td>11</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Total number of statements per indicator</td>
<td>52</td>
<td>55</td>
<td>107</td>
</tr>
<tr>
<td>Average number of statements per indicator</td>
<td>5.7 ~ 6</td>
<td>6.1 ~ 6</td>
<td>11.9 ~ 12</td>
</tr>
</tbody>
</table>

Key: Orange (Non-existant); Yellow (below average number of line items per country [light yellow] and combined [dark yellow]); Green (at or above average number of line items per country [light green] and combined [dark green])
Conclusion

This initial policy review compared U.S. and Canadian pre-service SLP curricular standards to indicators of research-supported competencies for diagnosing and treating REBs with confirmed or suspected communication disorders. Comparing standards from both nations allows for reciprocal learning due to similar demographic changes among children, cultural and language variations between SLPs and children, and systematic SLP training and practice. Both sets of standards indicate that currently, schools are training SLPs in four key indicators. These indicators include awareness of how biases can affect assessment and intervention selection, respecting different cultures and languages during assessments and treatments, working with children and families from diverse backgrounds with humility, and understanding how racism and other forms of discrimination can affect bilingual and racialized children. As research has demonstrated, SLPs need these indicators in curricular standards to assist REBs effectively and inclusively. Nonetheless, both sets of standards occasionally lack particular guidance in two areas that are routinely challenging for SLPS which are: how to use interpreters, supporting the child's home language, and interacting with multilingual families. These three indicators are not well-defined based on the average number of items. As such, SLPs may not be receiving adequate training in these areas, making it difficult to work with REBs and their families. Finally, there is no language in both standards which aligns with research-supported views around the benefits of bilingualism and how this is not a cause for communication disorder. While research continues to prove this to be true (i.e., Byers-Heinlein & Lew-Williams, 2013), these beliefs continue to be practiced by many service providers working with children with disabilities (Newbury et al., 2020; Paz et al., 2023; Scherba de Valenzuela et al., 2016). Addressing such gaps in current guidance for SLP training will enhance services to REBs for
several reasons. Doing so will ensure that all children, regardless of ethnicity or language, have access to high-quality services while also hindering under or overrepresentation of REBs being referred to SLP services (Newbury et al., 2020). This will also aid SLPs to communicate with children and their families, subsequently improving all aspects of the therapy process. Finally, addressing these current gaps help SLPs to deliver culturally responsive services, reduce bias and discrimination, and ensure fair assessments and treatments espoused by Code of Ethics for SLPs in both countries. Policy suggestions are below.

**Policy Recommendations**

What improvements are needed in curricular standards?

**National and State/Province Licensure and Accreditation Organizations for SLPs**

1. Revise curricular standards for certification and licensure so that all pre-service SLP have mandatory coursework and clinical hours related to the assessment and treatment of racialized emergent bilinguals.

   - Coursework(s) should address the implementation of valid bilingual assessments (e.g., dynamic assessments, observations, language samples, etc.), how to work with interpreters, how to adapt and select materials to support children’s bilingual development, how to embed cultural humility and responsiveness into assessments and interventions, bilingual language development in children with and without disabilities, how to embed the home language in all aspects of treatment, and how to work with parents who speak languages different than those of the SLP.
Certification and licensure bodies should require that at least 10% of the clinical hours needed for certification to be related to bilingual assessment and intervention.

2. For practicing SLPs, require at least 1 hour of continuing education focused on bilingual assessment and/or intervention during each certification and licensure renewal cycle.

Institutes of Higher Education (IHEs)

1. Align course requirements with national and state/provincial certification and licensure requirements for pre-service SLPs.

2. Revise curricular program of study to embed how to effectively assess and treat bilingual children with suspected or identified disabilities in all core courses (e.g., speech sound disorders, child language development, voice and fluency, hearing sciences, phonology, neurolinguistics, Augmentative and Alternative Communication (AAC), swallowing/dysphagia, etc.).

2. Provide ongoing professional development to all faculty in the department to revise their syllabi and instructional materials, as well as to increase their knowledge about bilingualism as it relates to their specific course content.

- Ensure that experts contracted to provide the faculty with ongoing professional development are insiders in the communities they are training about, with a variety of clinical, professional, and pedagogical perspectives. Furthermore, offer equitable compensation to all trainers, especially those who are Latine, Black, Indigenous, Asian, and others of color.
Federal and State/Provincial Agencies:

1. Fund research to expand the current understanding of how to conduct valid bilingual assessments and culturally responsive treatments to racialized children with disabilities, with special consideration on funding research led by community insiders.

2. Fund programming to increase the linguistic, racial, and cultural diversity of the SLP workforce through recruitment and retention efforts focusing on collaboration between states, IHEs, and local community programs such as public schools, hospitals, and clinics.
References


