# Differentiating Language Difference versus Language Impairment in Young Dual Language Learners

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osario is a 4-year-old Spanish-speaking girl who just started preschool. She is very shy and interacts very little with the other Spanishspeaking children in the classroom. Her family moved recently from Ecuador. Her teacher is a little concerned and wonders if she may have a language delay or impairment. She wants to know whether she should make a referral and how to help support Rosario's learning in this new environment.

Over the last 10 years we have seen significant demographic shifts in the younger population of the United States. About 20% of the school population overall speaks a language other than English. Twenty-two percent of children under 18 have at least one parent who is foreign-born. While states like Texas, California, Florida, New York, and Illinois continue to have large numbers of dual language learners (DLLs) in their schools, many other states have seen dramatic demographic shifts in their populations. For example, in Georgia, Tennessee, and South Carolina there has been over 200% increase of the Hispanic population (Perry & Mackun, 2001). While Spanish is the most commonly spoken language other than English, over 300 other languages are spoken in the U.S. (Flynn & Hill, 2005; Mackun & Wilson, 2011). Asian languages are among the fastest growing group of languages spoken in the U.S., and include Vietnamese, Hmong, Cantonese, Mandarin, and Korean. These shifting language trends mean that English language learners are more and more likely to be represented in preschools and schools across the U.S. Even if you are

bilingual or have working knowledge of another language, it is likely that you will have a child whose language you do not know in your class.

At the preschool level it is critically important that early childhood educators and other personnel who serve this growing population understand the educational and linguistic needs of these children. At preschool, language testing is often done for two reasons: planning instruction and screening for possible referral. Knowing about the normal progression in moving from the first language to the second language will help us to know what to expect and how to best support learning within the preschool curriculum. When developing goals for teaching and learning it is important to know that first and second language learning at home and at school takes place within a cultural context in which there are implicit assumptions about early childhood development. Thus, it is important to know about second language learning and how the first language might affect second language performance. Also, it is important to understand possible cultural influences on communication patterns.

Screening for possible language-based impairment is often the first stage of making a referral. Yet, children from different linguistic and cultural backgrounds may not perform similarly to monolingual English speakers on formal or informal language screeners. Understanding how best to distinguish language impairment and normal second-language learning will help us provide appropriate referral and education to all children who are enrolled in our preschools.

# Cultural Context: Home and School Differences

The great majority of children who speak languages other than English at home have immigrant parents (Bedore, Peña, Joyner, & Macken, 2011; Capps et al., 2005). There are linguistic and cultural differences that may affect child performance in the school setting that should be considered in any evaluative process. These factors include the child's cultural context, the family's views on learning, and the child's linguistic background. The form, configuration, and content of schooling in children's home country may be unlike that of schools in the U.S. Thus, in addition to potential language barriers; there may be barriers related to knowledge of U.S. preschool expectations and practices. Preschool curricular goals and expectations reflect what is known about child development, but these goals and expectations are filtered through culturally-based perspectives.

Examples of how broad, developmental goals are filtered through cultural perspective and local expectations are found in cross-cultural comparative studies of preschool education. For example, Wong (2008)

conducted a comparative study of preliteracy instruction in two model preschool programs: one in Canada and one in Hong Kong. Both of the programs were based on constructivist principles (Vygotsky, 1978; 1986) where the emphasis is on learning through action and discovery. In this way, children are thought to develop or construct an understanding of their experiences. Yet, within this framework there were culturally specific ways of teaching preliteracy skills that were further associated with the two distinct writing systems. In the Hong Kong classroom, emphasis was on manual dexterity, learning the basic strokes of the Chinese characters; paired reading and recognition of Chinese characters; and learning to recognize the radicals (i.e., the common stroke patterns within a character) that would help them to characterize common semantic or phonetic aspects of Chinese characters. Here, both content and form was important for preserving meaning. In the Canadian classroom, the focus was on writing letters with care, attention to the sounds of words, association of sound and letters. Approximate (not correct) spelling was accepted to emphasize sound-symbol relationships. Even though the goals and philosophy of teaching was similar, there were specific yet different ways that goals were implemented in these two contexts.

Another example of cross-cultural preschool practices come from Lee, Lee, Han, and Schickedanz (2011) who studied Korean and American teacher attitudes and practices with respect to classroom book environment. Teachers in Korea and the U.S. both indicated that listening, speaking, reading, and writing were goals of the curriculum, with an emphasis on oral language development in the preschool curriculum. Differences were in how these were implemented in the classrooms. Korean teachers expressed the goal of helping children to develop good listening. American teachers on the other hand emphasized their role in modeling and using open-ended questions. In describing goals for read-alouds, both groups of teachers mentioned comprehension, story enjoyment, and relating the story with personal experiences. But, there were some differences as well. The Korean teachers mentioned the goals of expression, articulation, and vocabulary learning. American teachers mentioned group participation, listening, concepts of print, and attention span as learning goals for this task. Korean teachers more often selected nonfiction books while American teachers more often indicated that they selected fiction for reading aloud. Here again, we see similarity in goals, but differences in how those goals are implemented.

The above differences in implementation of curriculum illustrate the cultural nature of schooling practices. Teachers' implementation of the curriculum matches the cultural expectations of the community to an extent. But, when children who are DLLs enter U.S. preschools, they may not only speak

a different language, their experiences prior to preschool may be different from those of English-speaking children of the U.S. Specifically, home practices and interactions may be aligned with goals and expectations reflected in their home countries' approaches to teaching and learning. Parent and teacher expectations for learning may therefore not be well aligned.

## **Culturally Based Differences in Communication**

Variation in communication practices across cultural-linguistic groups is illustrative of potential language-based variation. The ways that parents interact with their children using language across varying contexts is

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reflective of their goals and expectations for children. These goals and expectations are contextualized socially and culturally. Thus, an evaluation of language performance needs to take into account differing beliefs about how children should be socialized. Compared to U.S. mainstream schooling expectations, children from different cultural backgrounds may vary in the amount of language use, the persons with whom they initiate interactions, and the patterns and content of those interactions. These

differences in pragmatic use of language should not be construed as a language delay or disorder.

There are well-documented cultural differences that affect language interaction patterns particularly in adult-child speech. An important cultural variation has to do with initiation of talk and turn-taking. In U.S. mainstream culture, children are often seen as equal conversational partners with adults. Yet, this is often not the case for other cultures. Greenfield's (Greenfield et al., 2006; Raeff, Greenfield, & Quiroz, 2000) continuum of collectivism-individualism provides a context for understanding cultural interaction patterns on the basis of group goals for development. On the collectivism side of the continuum goals include group harmony. Within this goal, socialization practices focus on development of a sense of duty to the immediate community as well as respect for elders. Thus, interaction patterns where children are not expected to initiate conversation with adults, where adults hold the floor during conversations with children, and where adherence to social norms are impor-

tant are often seen among groups who have a collectivistic orientation. These interaction patterns are in direct contrast to U.S. culture and may result in cultural conflict in the classroom. Goals associated with individualism include independence, self-awareness and competition focused on individual achievement. Language interaction patterns that encourage children to initiate conversation, to provide elaborate responses and explanations, and to hold the floor as an equal conversational partner are consistent with goals of individualism. These are often the goals that are implicit in U.S. preschool curriculum. Therefore, home language interaction patterns may be inconsistent with those of the school.

#### Rosario

When considering if it would be beneficial to refer Rosario for evaluation, it would be helpful to consider her experience with the school setting and her family's experience with U.S. school expectations. As a recent immigrant family from Ecuador, it is likely that Rosario's family has established different interaction patterns from what might be expected for her in a U.S. school. Talking with Rosario's family about her interaction style and her home language use might provide the teacher with information needed to distinguish if the child has potential language problems that are evident in settings outside the school. Also, by discussing expectations for communication at home and school it may be possible for the teacher to frame Rosario's strengths and weaknesses within the school setting so that the teacher and the family can maximize Rosario's participation in the classroom.

# Second Language Acquisition in Early Childhood

There are two broad types of bilinguals: simultaneous bilinguals and sequential bilinguals. Simultaneous bilinguals acquire both of their languages together. As a result they advance through the same developmental stages as do their monolingual peers (Conboy, 2006; Sebastian-Galles, 2011). Children exposed to two languages from birth babble in their first year of life, start to produce words by the end of the first year or beginning of the second year and then start to combine words into sentences. Changes over the preschool years revolve around increasing the precision of their speech, increases in the amount of vocabulary children know, the precision with which children use this vocabulary, and in the length and complexity of the sentences they produce. Although simultaneous bilinguals advance in much the same way as their monolingual peers do,

there is more variability in their progress. For example, some researchers have indicated that bilingual children are less intelligible relative to their monolingual peers. This may be because they produce speech sounds that would typically be produced in two different ways in each of their languages in a single way that differs slightly from both. For example in Spanish the initial [b] sound is a soft fricative-like sound while it is a harder stop sound in English. Using an intermediate production might make children a little more difficult to understand (Gildersleeve-Neumann, Kester, Davis, & Peña, 2008). Children also often get their input in each language in different contexts so they may not know all concepts equally well in both languages and their vocabulary differs somewhat by languages (Kan & Kohnert, 2008; Peña, Bedore, & Rappazzo, 2003). In addition, children may not use both of their languages to the same extent, so their total exposure may vary. The amount of time children use each of their languages is a powerful predictor of how well they will perform in that language (Bedore et al., 2012; Sheng, Bedore, Peña, & Fiestas, in press).

Sequential bilinguals, in contrast, start to acquire their second language after they have gained knowledge of their first language. When children started to acquire a second language between 2 and 4 years of age they are considered to be early sequential bilinguals. Many English language learning



children attending preschool programs in the U.S. fall into this group, as their first systematic exposure to English starts at school entry. What is unique about sequential bilinguals is that they can draw on their first language knowledge as they acquire their second language. For children acquiring a

second language at preschool age this means that they already understand the function of language and their first attempts at the new language will be words and routine phrases rather than sounds. As children produce these words, they refine their production of sounds and sound patterns in the L2 and increase their vocabulary in ways that reflect their patterns of exposure of to each of the languages. They also

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increase the length and complexity of their sentences.

Because the patterns of production are influenced by children's first language knowledge as well as the context of learning (including opportunities to use both languages), there are a number of common errors associated with second language acquisition. Like monolingual children, early sequential bilingual learners will produce some developmental articulation errors (e.g., "w" for the English "r") and they produce some sounds and patterns that are influenced by the other language (e.g., increased likelihood to reduce consonant clusters or omit final consonants in English in the case of Spanish-English or Mandarin-English bilinguals) (e.g., nes / nest) (Fabiano-Smith & Barlow, 2010). In the vocabulary domain, children's knowledge of words is distributed across the languages and thus, their vocabulary in each language might be smaller than expected relative to their monolingual peers. Also, the words children know in each language are influenced by the contexts in which they use the language. Thus, a child might know about shapes and colors in the school language but have more access to vocabulary about foods or clothing items in their home language. Even when they are still acquiring vocabulary, children who are typically developing are unlikely to produce naming errors (e.g., bird/borse) but they may use words to describe (e.g., "you ride it") or use a more general word (e.g., animal) if they don't know the correct words (Peña, Bedore, & Zlatic, 2002).

Children's knowledge of grammar in their first language also interacts with their second language grammar development. For example, in Spanish plural is marked (e.g., *gatos*) as it is in English (*cats*). But children may still omit plural –s in English because they are unaccustomed to producing final clusters (e.g., *ts* in *cats*). Mandarin-speaking children may encounter more

competition from their first language when learning the English plural forms. This is because Mandarin does not utilize plural morphemes—instead, plurality is marked with numbers or adjectives so children may say two cat or many cat instead of two cats or many cats. Furthermore, the majority of Mandarin words have an open syllabic structure; word final consonants are very rare. For these reasons, Mandarin-English bilinguals, like Spanish-English bilinguals, are likely to omit word final plural morphemes. Similar influence from the first language can be expected when Mandarin-speaking children are learning English present and past tense marking. Because Mandarin does not employ tense marking morphemes (-ed, third person singular) and rarely allows word-final consonant, omission of tense markers are to be expected even among typically developing Mandarin-English bilingual children. Learners are also challenged when concepts are represented in different ways in each of their languages. This is the case for prepositions. Concepts that are expressed via prepositions in English (the man is climbing up the tree or climbed down the stairs) are expressed via verbs in Spanish ("climb up" is "subir" in Spanish while "climb down" is "bajar" in Spanish). As a result, Spanish-speaking children may omit these forms.

While we can point to developmental milestones for monolingual languages acquisition, we are still lacking data about the expected rate and order of developmental milestones in bilingual acquisition, particularly for sequential bilingual learners. That said, children seem to progress in the same order as in monolingual- or first-language development. Children make early gains in speech sound acquisition. After a relatively short amount of time (a year or less in some cases), children produce most of the speech sounds of their second language accurately. Children continue to systematically add vocabulary and with experience gain deeper knowledge of the vocabulary they know. In regard to grammar, children also appear to acquire the same structures that emerge early in first language acquisition and demonstrate protracted development of those forms that emerge later in acquisition (Bland-Stewart & Fitzgerald, 2001).

## Language Impairment and Bilingualism

Primary language impairment (PLI) is a significant language impairment in the absence of other developmental difficulty such as cognitive, hearing, and neurological impairment. PLI affects about 7%–10% of 5-year-old children (Beitchman, Nair, Clegg, & Patel, 1986; Tomblin et al., 1997). The prevalence of secondary language impairment—language impairment that results from or secondary to other conditions (e.g., intellectual disability, autism spectrum disorders)—is more difficult to estimate. Recent estimates from the Center for Disease Control and Prevention (CDC)

shows that about about 1 in 6 children in the U.S. has a developmental disability (CDC, 2011), and about 1 in 88 children exhibit autism spectrum disorders (CDC, 2010). Although these statistics do not differentiate between students from mainstream cultures or diverse backgrounds, the prevalence rates of both primary and secondary language impairment are expected to be comparable among English language learners.

# How Do Professionals Differentiate Language Differences from Language Disorders?

There are at least two parts to the answer. First, as discussed earlier, professionals need to carefully consider the cultural context in which the child is learning and using language. Different cultural communities may hold very different beliefs and standards regarding how children should be socialized. This will in turn influence the quantity, quality, and pragmatic patterns of language exposure available to the child and may present conflicting experience and criteria between the child's home and school environments. Second, professionals must be aware of how language acquisition may vary for children who are learning two or more languages at once. Knowledge about these variations in the achievement of English language milestones is critical for decision making. We provided some examples of variations in the previous section. Below we provide a case example to illustrate the steps that can be used to decide whether or not to make a referral for a speech-language evaluation.

## Minhong

Minhong is a 4-year-old Chinese-American boy who is in preschool. Minhong's family has been living in Houston for 8 years. At home the family has always spoken only Mandarin Chinese. From 6 months to age 3 Minhong was enrolled in an English-only day care. He just finished the first year of preschool. Minhong plays well with his peers but he has difficulty conversing with his friends. Minhong has a number of speech and language features that differ so significantly from his peers' that his preschool teacher wonders if an evaluation is warranted. The following have been noted about Minhong's speech and language:

- He reduces initial consonant clusters (nack for snack) and deletes final consonants in English (ca for cat).
- He frequently shows word-finding problems (saying "that car guy" instead of "driver" and makes naming errors ("shoes" for hats).
- · Most of his utterances are one or two words long.

- He has difficulty comprehending directions and narratives in the classroom.
- His twin brother often clarifies his speech to unfamiliar adults who cannot understand him in either English or Mandarin.
- Minhong's parents report that it is easier to understand his twin brother than it is to understand Minhong in both English and Mandarin.

There are two important questions to consider in deciding to make a referral and in making a decision about language impairment:

1. Length of time speaking English and current exposure to the home language vs. English. Research examining the relationship between exposure to two languages and performance on morphosyntax (i.e., grammar) and semantics (i.e., vocabulary) tasks indicates that current exposure is strongly associated with performance of the control of

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mance in each language (Bedore et al., 2012; Sheng et al., in press). We also know that young children who have near equal exposure to each language may show relative strengths and weaknesses on some tasks in the home language and also may show advantages and weaknesses in the school language on other tasks (Peña, Gillam, Bedore, & Bohman, 2011). Given considerable exposure to both school and home languages, we should expect children who are DLLs to be able to meet basic demands in

each language. Errors are expected, but they should not interfere with communication.

2. Expected errors due to second language acquisition vs. errors that are typical of children with language impairment. Given the grammatical and phonological structure of the first language it is expected that children would make what are considered to be "common predictable errors.. In Spanish, for example, the preposition "en" means both "in" and "on," thus, it is not uncommon for Spanish-speaking DLLs to make "in-on" reversal errors. In Mandarin English bilingual children, English tense marking errors are to be expected in the early stage of English acquisition and should not be a surefire sign of language impairment.

Further, we would expect language impairment to manifest in both children's languages. It would never be expected that children with language impairment would have no difficulties in one language but impairment in the other language. We would, however, expect children to demonstrate uneven performance across their two languages, depending on both context and language exposure.

Here, we return to Minhong to consider whether he should be referred relative to the above questions:

With respect to second language exposure, we note that Minhong has had exposure to English since 6 months of age although most of his home input is in Mandarin. Thus, it appears that he would have had enough cumulative input in both languages to develop good skills in

both. Further, he continues to have input in both languages, so we might expect shorter utterances in one language or the other, but not in both. Similarly, for a child with balanced exposure, we might expect naming errors to occur in the less used language for given tasks. For example, kinship terms may be better known in Mandarin, but colors and shapes

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should be more accessible to him in English. If he demonstrates these kinds of errors in both languages across tasks, this would be a cause of concern. With respect to patterns of speech and language errors it appears that he makes both errors associated with learning English as a second language (e.g., deletion of final consonants, cluster reduction) as well as errors associated with language impairment (e.g., naming errors). Another indicator of possible language impairment is the use of short sentences. At age 4, Minhong should be using longer utterances in both languages. Finally, his twin who presumably has similar language experiences does not present with these difficulties. This provides a good control comparison for evaluating language performance and expectations.

## Supporting First and Second Language Learning for Young Children with Language Impairment

There are a number of strategies that can be used in the preschool classroom to support language learning in young bilinguals with language impairment. These include providing opportunities for children to hear models, opportunities for children to talk with peers, and support of language development in *both* languages. Care should be taken in providing suggestions to parents that are consistent with their beliefs about language development and children's roles.

Children need to hear the language that they are learning. This helps them to understand the patterns of the sounds and the ways that they can go together. Providing a large number of models of the target in different ways helps children to pick out the details of the language. Providing children with examples that are structurally similar to what you want them to say helps them to learn and retain the target. Children do not necessarily need to repeat what it is you say, but they might need to have some opportunity to successfully use the words and phrases they know.

Children with language impairments often do not have the opportunity to interact with typically developing children. Teachers may need to help children with language impairment participate in structured play activities. Also, including and encouraging participation during group activities through turn-taking and imitating might be a good way for children to learn the basic routines of the classroom.

Finally, there is no reason that children with language impairment cannot be bilingual. Stated another way, bilingualism does not cause language delays or impairment. But, there are special considerations for children who have exposure to two languages. We believe that communication is fundamentally important. Thus, it is important to build communication strategies in both languages so that the child can communicate functionally in both home and school settings. Given differences in the demands across home and school, children need to learn language skills that are appropriate for each. This may mean that targets are different for each of their languages (Kohnert, Yim, Nett, Kan, & Duran, 2005; Peña & Stubbe Kester, 2004). The ways that the goals are implemented also may be different. Goals in the home language should be consistent with family goals and expectation for interaction. Developing goals for the first language will help to avoid attrition or loss in the first language (Anderson, 2011). It is important to maintain children's ability to engage in important social interactions in the native language. These interactions will help foster learning in the second language as well. Goals in the school language might help the child meet academic demands.

#### Conclusion

Parallel to the increase in bilingual population in the U.S., there is increasing research on bilingualism. Emerging research on typical bilingualism and bilingual language impairment provide guidelines for best practices

in assessment. Evidence thus far suggests that there are similar patterns of language impairment and typical development in bilingual and monolingual populations. For bilinguals, both languages and cultural context(s) need to be considered in order to make a determination of language impairment.

#### Note

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