Exploring the Uniqueness of Child Second Language Acquisition (SLA): Learning, Teaching, Assessment, and Practice

Jenefer Philp
Lancaster University

Margaret Borowczyk
Georgetown University

Alison Mackey
Georgetown University

This issue was designed to include a wide range of research on children’s second language learning. Here we provide a short overview of each of the articles contained in this issue, many of which bring up novel ideas and topics, as well as new takes on familiar themes that sometimes challenge prior conceptions and, ideally, inspire new understandings of child language acquisition, and policies, and practices in instructed settings. The 15 articles in this issue are based in instructed and naturalistic settings and include reviews and experimental work, and collectively represent learners between 5 to 18 years old. The language backgrounds include Mandarin (first language [L1]), Arabic (L1), Basque (L1), Cantonese (L1), English (second language [L2]), Hebrew (L1, L2), Spanish (L1, L2), and Thai (L1). Topics include the uniqueness of child second language acquisition (SLA); learning in majority language classrooms; best practices in bilingual schooling, cognition, and SLA in younger learners; testing and assessment relating to age and language choice; and methodological contributions that arise from the particular challenges of researching child second language development in instructed and naturalistic settings.

THE UNIQUENESS OF CHILD SLA

The uniqueness of the experiences of younger language learners is obvious, yet is vital to acknowledge its importance with respect to SLA, as Oliver and Azkarai’s review article points out (see also Paradis, 2007). When children are compared to adults with respect to context, relationships, and development, interesting differences emerge. In the research presented here, the age of participants ranges from 5 to 18 years, roughly approximating the span of developmental changes over the years of compulsory schooling in many countries, from early to middle childhood and early to late adolescence. In contrast to adult learners, adolescents and younger children in particular lack the independence and autonomy of adults,
in home, community, and school contexts. Children learning in an unfamiliar environment and through an unfamiliar language are even more dependent, as they rely on the support of both teachers and peers in order to assimilate successfully in their new language context. Cekaite also points out that this support is not always provided willingly or with the expertise required. L2 learners seek alternative ways to work within a school culture in which they lack both essential knowledge of “the system” and proficiency in the societal language—the key tool for communication, negotiation, and positioning (Day, 2002; Philp & Duchesne, 2008).

Over the span of child development (physical, psychological, emotional, and social), relationships are intrinsic to change over time, providing the backdrop for both first and subsequent language (and dialect) acquisition. Adult and peer relationships play complementary roles. Hartup (1989), for example, suggested that adult family members, teachers, and community members provide children with protection, security, and a context for developing basic social skills, cultivating these throughout childhood and adolescence. Adults’ inherent status, and superior knowledge and experience, places them in a vertical relationship with children. Importantly, trusted adults provide a context for children to observe and practice new skills and knowledge, and to be encouraged, affirmed, or corrected. In contrast, peers, by their equivalence (Damon & Phelps, 1989a), provide a context for children to contest one another’s ideas and assertions, consider alternative possibilities, and try out language and conceptions in ways not possible with adults (Hartup, 1989; Laursen & Hartup, 2002; Philp, Oliver, & Mackey, 2008).

By age 5, children are almost on the cusp of middle childhood, by which time most children’s language reflects a substantial lexicon and some syntactic complexity. By middle childhood, the ways in which children process the world around them is further advanced. They start to develop a capacity for metacognitive awareness and begin to take pleasure and amusement from puns, riddles, and other linguistic play (Cekaite & Aronsson, 2005). With this emerging metacognition, they are able to think in more sophisticated ways about how language works (Duchesne & McMaugh, 2016) and become more aware of differences between languages (e.g., Muñoz, 2017). With further years of schooling, literacy becomes an additional tool that further enhances communication skills and expands students’ linguistic repertoire, particularly in late childhood and adolescence. This is discussed in Oliver and Azkarai’s review of child SLA in instructed settings, in which children’s ability to provide feedback to one another, and to benefit from interaction with one another is evident, although this varies according to age.

With respect to foreign language learning, where exposure to target input is limited, there seem to be particular advantages for older learners. With their greater cognitive maturity, adolescents are able to make effective use of explicit knowledge for foreign language learning and speed up the process (e.g., Cenoz, 2003; García Mayo, 2003; Larson-Hall, 2008; Muñoz, 2006, 2009). Recognizing the nature of cognitive processing at different stages of maturation is important for thinking about effective ways of teaching for each age group (e.g., Paradis, 2007),
as evidenced in the stages from early childhood to adolescence represented in this collection.

LEARNING EXPERIENCES IN MAJORITY LANGUAGE SETTINGS

A number of the studies collected here provide detailed descriptions of young children’s involvement in the classroom as novice learners of a new language and culture.

Cekaite’s study is based on longitudinal data of the experiences of two 7-year-olds, Nok and Fusi, in their first year of acquiring Swedish in a second language classroom. It highlights two very varied learning trajectories, molded by different L2 resources, affective stances, and local identities. Both children are active in whom they choose to be with, when and how they interact with others, and how they position themselves as competent learners. Consistently seen in research documenting migrant children learning English as an additional language in school contexts is the use of formulaic phrases as an early means of participation (e.g., see the seminal work by Wong Fillmore, 1979; see also Philp & Duchesne, 2008; Toohey & Day, 1999). Children adopt the language used by others in the class, both to gain attention from the teacher and from their peers and to align with the behavior of their peers. Cekaite’s careful description adds to formulaic sequences the use of paralinguistic features, such as body language and prosodic features (e.g., high pitch, smiles, and laughter), which serve to involve the child in conversation and enable participation.

Two common themes recur across this body of research on early years of schooling (5- to 8-year-olds): opportunities to align with peers through recitation activities and the autonomy of the learner (for review, see, e.g., Philp & Duchesne, 2008). These are both reflected in Cekaite’s research. The discursive practices of the teacher can provide and/or restrict opportunities for involvement with others. Conversely, however, children themselves have the potential to position themselves as “good students,” as Nok does, by aligning with classroom routines, employing amicable behavior (e.g., smiling, playful prosody, and language play), and using formulaic sequences gleaned from class recitation and teacher and peer talk. Alternatively, children may choose not to pay attention to classroom routines and expectations: Fusi’s loud ways and argumentative behavior cast her in another light, yet ultimately she is more proactive in participating in the class, and she is able to develop beyond reliance on formulae alone. Cekaite emphasizes that the students need to acquire more than what to say and when: they need to know how to say it—in a way that is received positively by the teacher. Taken as a whole, this body of research illuminates the ways in which children can be positioned as “weak” or “strong” (Barnard, 2009; Toohey, 2000; Toohey & Day, 1999) and as “well behaved” or “disruptive” (Cekaite), and these perceptions appear to limit or foster opportunities for access to L2 input and L2 use, which are critical to success. What Cekaite’s study also demonstrates is that young children can also exert their
own will to make the most of the potential for participation or attention of others, whether teachers or peers.

**POLICY AND PEDAGOGY: INSIGHTS INTO BILINGUAL SCHOOLING**

Collier and Thomas provide an impressive and very comprehensive review of the results of 32 years of longitudinal studies of grades K–12 carried out in the United States. They provide a convincing picture of the greater effectiveness of long-term bilingual programs when compared to English-only and short-term transitional bilingual programs (see also MacSwan, Thompson, Rolstad, McAlister, & Lobo). Both studies emphasize that language learning is a long-term undertaking, and they make the claim that it can be efficiently achieved through learning in both first (L1) and additional (L2) languages rather than by English-only or short-term transitional programs (e.g., Lindholm-Leary & Genesee, 2010; Ramírez, 1992; Rolstad, Mahoney, & Glass, 2005). Collier and Thomas also suggest that dual language instruction enables students to keep up with their English-only peers cognitively by engaging with material that is age appropriate and consistent with their developmental level. This is illustrated, for example, in a study by Cummins, Mirza, & Stille (2012) in which they describe the experience of three L1 Urdu English language learners (ELLs) with mixed proficiencies. Working with written texts in a Grade 7/8 social studies classroom in Canada, the three girls initially collaborated orally in their L1 to then create a bilingual text of their experiences moving to a new country, first writing in English and then in Urdu. Their work was scaffolded by L1 use, by familiarity with topic content, and by the greater proficiency of two of the participants. In this way, the student with minimal proficiency was able to participate fully. Cummins et al. (p. 40) argued that “when classroom instruction opens up the space for learners to use the full repertoire of their cognitive and linguistic tools and feel confident about the legitimacy of using their L1 for academic purposes, then academic performance can increase dramatically.”

Collier and Thomas emphasize that acquiring language for school purposes, such as that described in the preceding paragraph, takes 7–10 years to acquire, and more still for those denied the additional resource of their first language in school. In this, they recognize the dual burden of developing more complex cognitive ability and the language to articulate this, as required of more advanced curriculum content. Collier and Thomas’s findings make clear that without the resources of their L1, younger teenagers lack the tools needed to develop cognitively and academically at the level required, lag well behind their peer group, and take longer to catch up. Added to this is the concern of how to foster development of the child’s L1. This research provides strong support for well-managed bilingual language programs, involving teachers who are proficient in the two languages and trained in the content area. Paradis & Jia (2016), in a longitudinal study of L1 Chinese, L2 English students with 4.5 to 6.5 years of exposure to English in school, found
length and quality of language exposure more predictive of being closer to matching monolingual norms than cognitive factors. Language environment factors include home use of English with and by the child, richness of the English environment, maternal education, and maternal fluency in English.

Flores and García advance the argument that dual language programs where languages are used separately in different classrooms can constrain some learners from making the most of their linguistic resources. Similarly, Menken and Avni support an interpretation consistent with translanguaging practices. In this view, fluidity is considered a feature rather than a transitional stage (see also Canagarajah, 2011; Creese & Blackledge, 2011, 2015; García & Wei, 2014; Hornberger & Link, 2012). MacSwan (2017, p. 171), for example, suggested that conceptually, “translanguaging and related ideas promote a positive view of bilingualism, permitting bilinguals to act naturally, using language as they do at home and in their communities.” Menken and Avni’s research documents a Hebrew-English bilingual education program for middle school children, many of who speak Hebrew at home. Their article provides examples of the ways in which multilingual language practices, rather than monolingual practices, support learning of course content and offer greater opportunities for class participation.

MacSwan et al.’s research compares the theoretical premises and hypothesized outcomes of three different approaches to educating young learners in majority language contexts (the threshold hypothesis, transfer theory, and time-on-task theory). In this important exploration, MacSwan et al. address the continuing debate over best practices in schools. Using structural equation modeling, they explore the relative effectiveness of each of these three approaches, particularly in relation to academic achievement measured in English. Child participants were bilingual (L1 Spanish, L2 English) sixth graders who began learning English in kindergarten, drawn from different school districts. The researchers’ identification of specific components within language proficiency led to a battery of measures. Results add support to dual language programs, because Spanish literacy, more than English proficiency, was found to be substantially predictive of academic achievement.

Likewise, Flores and García’s critical review of bilingual education in the United States contrasts their own experiences as learners and teachers under different policy periods and offers a valuable and unique perspective on these programs, including linguistic and underlying social consequences of language policy decisions.

INSIGHTS INTO LANGUAGE PROCESSING AT DIFFERENT AGES

Comparing early language acquisition by infants (L1 acquisition) and children in early childhood (L2 acquisition), Paradis, Rusk, Sorenson Duncan, and Govindarajan report that, compared to L1 English learners aged 2 to 4 months, more complex sentences were produced by the L2 learners of English, with a mean age of 5 years (mean exposure to English of 1 year, 5 months). Based on mixed
logistic regression modeling they found that alongside longer and richer exposure to more complex language in school, contributing factors to L2 learners’ greater complexity were “larger L2 vocabulary, superior verbal memory, and visual analytic reasoning” (p. 148). Therefore, this study points to the combination of richer exposure to school-based language alongside verbal memory and visual analytic reasoning as the major factors promoting acquisition of more complex language by the 5-year-old L2 learners.

**Ability to Make Use of Cues to Speed Up Processing**

Lew-Williams’s experimental research compares L1 English and L1 Spanish bilinguals, ages 6 and 10, from Spanish immersion schools and explores efficiency in processing typically nonsalient features (articles) to identify target referents in pictures. Comparison of younger and older L1 and L2 children’s use of cues to grammatical gender, biological gender, and number of referents, through the use of eye tracking, found variation according to semantic transparency, where only the L1 children were able to use grammatical gender to anticipate the referent. L1 children and the older L2 children, with greater years of experience in Spanish immersion, were able to anticipate the noun through the use of biological gender. All children used number-marked articles to more quickly identify one of six objects. Drawing from L1 psycholinguistic research and literature on L1-to-L2 transfer effects, Lew-Williams’s explanations for these differences in processing highlight interactions between different types and sources of information.

Another aspect of processing efficiency relates to L1 language skills and how these may underlie L2 ability. In this issue, Muñoz’s 10-year longitudinal research of foreign language learning in primary and secondary schools in Barcelona provides an intriguing picture of similarities and differences according to age and grade level. Observations, interviews, aptitude scores, and course assessment provide a picture of the complex relationship between motivation, aptitude, and contextual factors that impact successful learning for these Basque-Spanish bilingual learners of English, tracked from childhood to late adolescence. Contextual factors such as teaching methods, repetitive classroom tasks, peer and family attitudes, and supplementary private language schools proved very powerful in swaying children’s learning trajectories. With regard to age, Muñoz found that aptitude tested in primary and secondary schooling predicted success on grades for these same learners as adolescents. This is consistent with previous research linking L1 skills/aptitude with L2 learning (e.g., Kiss & Nikolov, 2005; Sparks, Patton, Ganschow, & Humbach, 2009). Based on research with 12-year-old L1 Hungarian learners of English as a foreign language by Kiss and Nikolov (2005), Muñoz argues that where foreign language settings do not provide input-rich environments and rely more on explicit instruction, there is greater reliance placed on memory and analytic abilities.

Specific learning difficulties, or differences in processing, can cause difficulties for children learning a foreign language because of the ways in which languages are often taught in class. For example, children with dyslexia may experience
problems with L2 reading comprehension, regardless of the relative transparency of the language between sound and orthography. Kormos’s review argues that children with specific learning difficulties (SLDs) can successfully learn other languages with appropriate support in inclusive environments. This might involve accommodating differences in language processing among some children, such as using larger fonts, avoiding certain background colors behind text, reducing sensory overload, and making use of a range of senses in teaching (e.g., visual, kinesthetic, and auditory), as well as providing more opportunities for practice and time on task. This relatively understudied area in child SLA benefits significantly from Kormos’s contributions.

García Mayo and Labandibar contribute a study involving 60 Basque-Spanish foreign language learners, half at the elementary level, with a mean age of 13.3, and half at the lower intermediate level, with a mean age of 16.2. This study explores the process of “writing-to-learn” (e.g., Manchón, 2011), in this case, the extent to which writing can support language learning. García Mayo and Labandibar test the use of models as corrective feedback by investigating what students notice when writing independently or when comparing their text to models (e.g., Cánovas Guirao, Roca de Larios, & Coyle, 2015). Consistent with research on learner-generated focus on form in oral tasks with young adult learners (e.g., Williams, 2001), this study found that these elementary and low-intermediate-level learners, working with written texts, also predominantly focused on lexis, not other features such as grammatical forms. However, students also perceived model texts as uninteresting and difficult, and for that reason, lexical items may have required greater scaffolding in order to make language features more accessible.

INSIGHTS INTO ASSESSMENT

A range of articles provide insights into important issues in assessment of child language proficiency, including benchmarking, informal and alternative assessment tasks, and inappropriate interpretations and applications of assessment data.

Benchmarking is a complex issue in assessing students within school systems. Bailey discusses the necessity for teachers to be able to identify progress made by ELLs and to compare this with their monolingual English speaking peers. To do this, Bailey argues that it is important to provide description of language and discourse competencies of both students who are monolingual and those who are proficient, in order to establish expectations for each grade level. While this may be typically provided in other areas of the curriculum, it does not seem to be the case with regard to oral language skills.

In contrast, when testing children for specific learning differences, Kormos cautions against benchmarking using monolingual children with L1 majority language. Kormos suggests that, in situations where the child has at least 2 years of schooling in the L2, cognitive tests as part of the L2 tests can yield relevant information for identifying specific learning differences, though a combination of L1 and L2 assessment tools is recommended.
Related to this issue of benchmarking and expectations in assessment are cultural expectations regarding “knowledge.” Flores and García point out issues in standardized assessment that are benchmarked on monolingual White populations and reflect the particular cultural norms of the U.S. White middle class. They suggest that this privileges a particular understanding of what constitutes knowledge.

The interpretation of findings related to scores on rating scales for young children is discussed by Fortune and Ju. They explore oral proficiency among children in kindergarten, Grade 2, and Grade 5 where Chinese was the medium of instruction. While significant advances were seen between kindergarten and Grades 2 and 5, no difference appeared after Grade 2. These results are intriguingly similar to those found for Spanish immersion children at similar ages (Fortune & Tedick, 2015), but they propose a different interpretation, in other words, an issue in data analysis rather than evidence of a plateau effect.

Bailey incorporates work on school assessment practices and distinctions between purposes of summative and formative assessment (Black & William, 2009). In her article, she comments on the inappropriate use of summative yearly assessment for purposes of identifying incremental progression over shorter periods of time. Her research suggests that having a child describe and explain (rather than simply carry out a task) can provide insight into the child’s depth of understanding of a particular aspect of curriculum content (e.g., explanation of a Grade 3 math task), but importantly, for purposes of assessing progression in linguistic ability, it provides insight into the child’s engagement and linguistic ability to provide explanations. This kind of in-the-moment assessment carried out between teacher and student allows assessment to be more finely tuned to appraising to what extent the child is able to use certain language features, that is, what aspects of her language are still “under construction” and where she needs further guidance or remedial work. Similarly, Kormos’s review of the literature on SLDs highlights the need for assessment tests appropriate to the needs of the child.

Alcón-Soler’s research on adolescents studying abroad demonstrates the ways in which learners differ in their adoption of particular pragmatic moves in the use of emails to adults. Differences between the two focal students in what they chose to adopt suggests that while instruction is beneficial in equipping students with explicit knowledge of the potential meanings of modifiers, L2 pragmatic knowledge is also filtered through the learners’ own L1 experience and particularly by perceptions of how to signify respect for the teacher. As such, autonomy of the learner plays a large part in pragmatic performance.

Contributions to Research Methodology

Among others, Collier and Thomas’s 32-year-long research exemplifies issues in longitudinal school-based research. Their choices illustrate the importance of ensuring a focus on “the use of the L2 in a school context” rather than simply language competence in general (see also Cummins, 1999). As Muñoz (and Muñoz, 2017) points out, in reference to her 10-year study, it is difficult at the outset to
predict learner trajectories or what will turn out to be the more important features of the research to track.

As noted earlier, Fortune and Ju considered alternate interpretations for a lack of change in oral proficiency across children learning Chinese from Grades 2 to 5. They argue that global rating scales were too broad to pick up changes that occurred in their acquisition trajectory, rather these being the result of a plateau effect. Using a finely grained linguistic analysis of a small subset of the child participants, Fortune and Ju were able to identify differences in grammatical and lexical language complexity. Their important study suggests implications for assessment, particularly the use of more detailed analysis for child data in this grade range.

With regard to work among young multilingual learners, Melzi, Schick, and Escobar highlight the importance of identifying individual bilingual competence, rather than assessing bilingualism as a categorical variable. Through careful differentiation of emergent bilingualism according to language dominance and balance, they provide a more nuanced picture of relationships between bilingualism and self-regulation skills among children.

A number of the articles in this issue modified existing practices used for research with adults or reinvented techniques for working with child participants. For example, with respect to learning through interaction in the classroom, Oliver and Azkarai highlight the contribution of Pinter (2014), who encouraged researchers to consider the child’s own point of view while also recognizing potential issues arising from the immaturity of children, such as veracity and depth of insight, as well as ethical considerations. With the increasing trend to use stimulated recall to triangulate data in research on instructed language learning with adults, this is a potentially interesting area to pursue.

Child SLA research can also benefit greatly from other disciplines, notably, educational psychology, both with regard to theoretical framework and methodological issues. This is evident in the work of Paradis et al., which brings together expertise in both psychology and linguistics to better understand the nature of child SLA.

CONCLUSIONS

This ARAL issue tackles child SLA as a process quite different from adult SLA, exploring the issues from educational perspectives focusing on policy, bilingual schooling and assessment, and social and cognitive perspectives, focusing on grammatical processing differences among young children and adolescents, bilingual advantages, and the interplay between various cognitive and contextual factors in affecting learning outcomes. Scholars have discussed the need to focus on child SLA as separate from adult SLA, due to the lower levels of autonomy children have in determining the route, pace, and context of language learning, which greatly affects their experience. Many also point to the rapid cognitive development that children undergo, which affects their developmental trajectories and intersects
with language learning in ways it does not with adults. With this in mind, this issue’s contributors seek to shed more light on children’s experiences with language learning and influence how we study this population in the future.

The articles in this issue suggest some consensus on the effectiveness of long-term bilingual programs, as compared to English-only and short-term transitional programs for educating young, emergent bilinguals (Collier & Thomas; MacSwan et al.). Flores and García, as well as Menken and Avni, argue that many of these programs could be enhanced with the institution of fluid bilingual practices, rather than strict separation of languages throughout the day. Flores and García also advocate for a more explicit focus on disrupting inequality and the marginalization of minoritized communities within these bilingual schools, to reverse the shift from prioritizing the interests of White middle-class stakeholders.

Regarding language processing and development, Paradis et al. investigate how factors like language exposure, verbal memory, and visual analytic reasoning affect the complexity of children’s utterances in the L2. Lew-Williams explores the differential processing of grammatical gender L1 English and L1 Spanish bilinguals of various ages from Spanish immersion schools. Muñoz turns to the complex interplay between motivation, aptitude, and contextual factors in influencing L2 success for Basque-Spanish bilingual learners of English. The importance of context and affective stance also becomes evident in Cekaite’s study of two 7-year-old girls acquiring Swedish as a second language, as their learning trajectories become largely dependent on how they position themselves as competent learners. García Mayo and Labandibar’s study explores the effectiveness of models as corrective feedback in adolescents’ L2 writing. Finally, Kormos looks at how SLDs may influence L2 outcomes and how SLDs may be better accommodated by educators. In doing so, these authors raise important issues of operationalization and assessment of key constructs, which will likely guide future research in this area.

Various considerations related to assessment have received significant attention in this issue. Several authors take up the issue of benchmarking in their discussions. Bailey advocates for developing adequate descriptions of the language and discourse competencies of both monolingual and proficient students, in order to more reliably identify progress made by ELLs. Flores and García caution against benchmarking on White, monolingual English speakers, as standardized assessments resulting from these benchmarks then reflect the cultural norms of the U.S. White middle class and may not accurately represent the knowledge and competencies of other populations. Bailey also highlights the importance of supplementing summative assessments with in-the-moment formative assessments to better identify incremental progress on specific linguistic features. Reinforcing this statement, Fortune and Ju highlight the role that finely grained complexity measures can play in informing assessment practices, as they can capture a level of multidimensionality in oral proficiency that existing proficiency assessments often fail to describe. According to Melzi et al., the multidimensionality of bilingualism itself is rarely captured by measures that look at bilingualism as a categorical variable and by the studies that use this variable to predict cognitive outcomes, such as executive
functioning. They argue that bilingual competencies are captured best when measured along a continuum, as are their corresponding cognitive outcomes. Finally, Alcón-Soler, in researching adolescents studying abroad, writes that learner autonomy must not be overlooked when measuring learning outcomes, as the critical rejection or modification of certain linguistic and pragmatic forms may explain some divergence from target forms.

Pointing to future directions in methodology, Collier and Thomas, Muñoz, and Cekaite, in pursuing longitudinal designs, illustrate the importance of understanding deep contextual factors regarding language use rather than studying language competence as an isolated outcome. Reevaluating the role of children in research, Oliver and Azkarai encourage the practice of drawing on children as co-researchers to identify the gaps that exist between children’s and adults’ perceptions of what constitutes good language teaching and what might therefore constitute valuable research.

Surveying the central themes in this volume, it is clear that future research within the field of child SLA will need to address several key issues. It will need to tackle how best to design bilingual education to foster balanced bilingualism and combat the marginalization of the communities it was designed to serve. It will need to more precisely describe how factors that have emerged as central to adult SLA (e.g., aptitude, motivation, age, verbal memory, analytic reasoning, corrective feedback, and identity) are manifested in children’s learning processes and intersect with sociocognitive development. Finally, future research will benefit from developing ways to reliably assess a construct as dynamic and multidimensional as bilingualism, with the added challenge that these assessments must be workable in K–12 classrooms and not contribute to a deficient view of bilingual children vis-à-vis monolinguals.

The contributions to this issue demonstrate the value of considering children as participants (and possible collaborators) in SLA research. In a world where the phenomenon of children learning a foreign or second language is quite common, the field must adopt multidisciplinary, ecologically valid, reliable, and innovative methods to capture children’s full range of abilities and experiences. This will both help improve children’s educational experiences and illuminate the social and cognitive processes that underlie child language development.

REFERENCES


