US-China Education Review B, Sep.-Oct. 2022, Vol. 12, No. 5, 159-167
doi: 10.17265/2161-6248/2022.05.003

Facilitating Bilingual Development: An Examination of Child and Adult Bilinguals

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As globalization continues to increase, bilingualism has emerged as a popular topic in educational and linguistic research worldwide. Through a review of relevant research in the field of bilingualism, this article discusses its definition, explores the features that typify it based on existing research, and analyzes the most significant factors influencing its development in both children and adults. The article then examines the nature of bilingualism in children and adults and concludes by providing specific pedagogical implications for educators who work with English learners.

Keywords: bilingualism, English learners, language development, children, adults

Bilinguals can be categorized according to various criteria, but the context of second language (L2) learning is of particular prominence. One particular criterion for categorization is age, under which researchers divide the bilingual population into *child bilinguals* or *adult bilinguals*. This article reviews relevant research to explore the development of child bilinguals and adult bilinguals. To provide optimal service to language learners of all ages, it is essential to understand bilinguals' key, unique qualities, both as children and adults. This article also outlines the pedagogical implications for teachers who work with bilingual students.

Child Bilingual Development

Characteristics

Child bilingualism has specific features; unlike monolinguals, bilingual children show particular characteristics when using all languages in their daily lives.

Translanguaging. The combined use of both languages of a bilingual has traditionally been identified as *code-switching*; all the languages that an individual uses function cooperatively, and bilinguals have been found to switch codes depending on the situation (Baker, 2011; Shin, 2013). However, Garcia (2009) argued that code-switching simply described bilingual language use from the perspective of language itself. Thus, the term *translanguaging* is more appropriate for describing the language practice from the perspective of the language users. Therefore, Garcia stated that the concept of translanguaging evinced the lack of any clear-cut boundaries between the languages that a bilingual uses. As a consequence, from a holistic perspective, the combined use of different languages is the main characteristic of bilingualism.

Translanguaging functions as a unique yet typical bilingual language practice in which bilinguals engage in making sense of their bilingual worlds (Baker, 2011; Garcia, 2009; Gort, 2006; 2015). Orellana and Garcia (2014)

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emphasized that, when children translanguage, they are "able to draw from one linguistic repertoire that is socially constructed as two autonomous language systems" (p. 387). They also indicated that children are thinking bilingually when using only one language, and bilingual children's entire linguistic repertoire offers more resources than that available to monolingual children (Baker, 2011; Garcia, 2009; Shin, 2013).

One particular situation in children translanguage is when they function as language interpreters or language brokers. This often occurs in immigrant families, in which children frequently assist parents who have limited proficiency in the dominant language (Baker, 2011; Orellana & Garcia, 2014). As a valuable linguistic tool, translanguaging requires bilingual children to use their entire linguistic repertoire to fulfill specific social tasks with particular purposes, and the action of translanguaging depends largely on the topic, the context, and the interlocutors (Baker, 2011; Garcia, 2009; Shin, 2013).

Furthermore, translanguaging is rather frequent in bilingual children's literacy practice. In a multiple-case study, Gort (2006) selected eight first graders from a two-way, English-Spanish bilingual program. With the aim of investigating their writing processes, Gort observed the students in both English and Spanish writing workshops, interviewed them about their writing behaviors and understanding, and collected samples from all stages of the writing process. Gort noticed that all students drew upon both their languages in the process of composition; for example, the Spanish-dominant students used both English and Spanish when creating Spanish texts, while some also used both languages when drafting English texts. As a result, Gort concluded that the writing process typically involved both of the children's languages regardless of the language used for the written compositions.

Language shift. Many studies have noted that children's bilingualism profiles are not static but rather are dynamic and shifting. For example, in a study exploring parental influence on children's bilingual development, Malave (1997) found that English gradually became the dominant language for the bilingual children once they began to attend school despite their parents' insistence that they had adopted diverse strategies at home to retain their heritage languages. In addition, children may deliberately abandon their native language (L1) to gain acceptance from their monolingual peers as legitimate members of the mainstream community (Gallo, Link, Allard, Wortham, & Mortimer, 2014). Once they understand that there are differences in language, behavior, ethnicity, and culture, some youth—particularly teenagers—may come to perceiving their minority language and culture as undesirable, and they "quickly perceive what helps them belong and become accepted in mainstream society" (Baker, 2011, p. 127).

Advantages

Historically, the prevailing perception was that bilinguals had lower IQs than monolinguals had (Baker, 2011). In the early 1900s, the majority of research on bilingualism found either no correlation or a negative correlation between bilingualism and cognitive development, ostensibly suggesting that knowledge of two languages would usually retard cognitive growth and lead to mental confusion (Saer, 1923, as cited in Baker, 2011, and Garcia, 2009).

The perception of bilingualism began to shift in the mid-20th century. Pearl and Lambert (1962) reported on a study in which 164 10-year-old children—75 monolinguals and 89 bilinguals—were selected from six middle-class French schools. Pearl and Lambert found that bilingual children performed better than monolingual children did on verbal and nonverbal intelligence tests. The bilingual children in this study also demonstrated better academic performances. As Pearl and Lambert argued, bilingual children, compared to their monolingual

peers, tended to possess greater mental flexibility and were superior in terms of concept formation. These findings motivated increased study of the relationship between bilingualism and cognitive development, and Bialystok (2015) has since reported that bilingual children exhibit greater cognitive development than and outperform their monolingual peers, which demonstrated a positive correlation between children's development of bilingualism and cognitive development. This positive correlation changed the dominant view of children's bilingual development, and, as more scholars have become aware of the significance and benefits of bilingualism, they have begun to advocate bilingualism in children.

Intervening Factors

Various intervening factors affect child bilingual development, and chief among these influences are one's family, schools, and community.

Family influences. The familial environment inevitably plays a significant role in facilitating or hindering children's bilingual development, and the language modes that parents and other family members provide crucially affect children's language use. Ronjat is regarded as the first scholar to have introduced the one-parent-one-language concept (Garcia, 2009). He tracked his son's simultaneous acquisition of French and German, which he and his wife enabled via the one-parent-one-language dynamic; Ronjat spoke only French to their son, while his wife spoke only German. The one-parent-one-language formula was a tremendous success in this case, and Ronjat suggested that the separate use of the two languages by two people would promote children's acquisition of both languages simultaneously, with minimal confusion.

In bilingual families, parents' attitudes toward different languages also have a significant influence on children's language use. For example, Malave (1997) surveyed and interviewed 60 linguistic minority parents whose children were bilingual. In this study, Malave found that around 67% of the parents used two different languages when speaking to their children at different times, and that 13% of the parents adopted the one-language-one-parent approach. These parents also reported using multiple strategies to promote their children's bilingualism, such as offering preschool activities in either the L1 or the L2, providing opportunities for children to speak to relatives using the L1, and using children as L2 translators. Malave concluded that parents' attitudes influenced their children's bilingual development by affecting their children's language choice. Therefore, adults who value the use of more than one language actively promote child bilingualism, and parents' use of two languages is a facilitator of bilingualism.

Parental influence may also have a constructive effect on language policy, which in turn influences bilingual children's language use in other contexts. For example, the parents of bilingual children in San Francisco and San Jose in the United States sued the districts for neglecting their children's linguistic needs. The federal courts concurred and decided to remedy the problem by granting permission to provide L1 instruction to bilingual children (Crawford, 2004); this endeavor may help bilingual students maintain their L1 and further promote their bilingual development. In this way, parents' opinions and ideas provided guidance for educators and policymakers, which indirectly but significantly influenced children's language choices.

Influences of schools and community. Schools and local communities are two social contexts with which bilingual children interact. The social factors embedded in both contexts also have an impact on children's development of bilingualism. For example, in Malaysia, people have a negative view of English-speaking Malays, which has resulted in a low level of English proficiency among ethnic Malays (Shin, 2013). A similar situation affects bilinguals in the United States, where the aim of teaching English as an L2 is the rapid assimilation of

minority language groups into mainstream society. Therefore, a society's language ideology influences children's language practices and bilingual development or lack thereof. Some communities foster children's bilingual development by establishing extra schooling for children when traditional school settings fail to offer language courses and do not support immigrant languages. In countries such as the UK and Canada, some communities offer evening, vacation, and weekend classes in which bilingual children can learn their heritage languages. As Baker (2011) stated, "where English is the dominant language of the community and the only language of the school, such voluntary classes may be important in attaining bilingualism rather than moving children towards majority language monolingualism" (p. 122).

Furthermore, schools are expected to provide L2 learning when an L2 is not learned at home. Schools serve as sites in which children, particularly sequential bilingual children, can move from monolingualism to bilingualism (Baker, 2011). In a comparative ethnographic study, Gallo et al. (2014) compared teachers' and students' language beliefs about Spanish-English bilingual students in an elementary school and in a high school. Gallo and her colleagues found that the teachers in both schools exhibited conflicting attitudes. In the elementary school, the teachers viewed Spanish as a resource, and translanguaging was encouraged to assist bilingual students with their academic tasks. However, because the high school teachers regarded bilingual students as lacking English proficiency, they demonstrated negative attitudes toward translanguaging, which they regarded as undesirable. Influenced by the teachers' attitudes, the bilingual students at both schools tended to develop contrasting ideas about language use; the elementary school students felt that Spanish was beneficial for their academic performance and that translanguaging also promoted their development as emergent bilinguals, while the high school students, even the immigrant students, either recognized the power of English and chose to abandon Spanish or refused to speak English to maintain their sense of belonging to the Spanish community. Neither attitude contributed to the high school's development of bilingualism. Accordingly, Gallo et al. (2014) asserted that "beliefs about immigrants' language can shape beliefs about the immigrants themselves and this can in turn influence how they are treated" (p. 125), as well as how different languages are viewed.

Adult Bilingual Development

In comparison to child bilingualism, adult bilingualism has not been extensively studied, and it is debatable whether adults are too old to learn an L2 proficiently. However, it has been found that adults can develop bilingual fluency and even reach an advanced level of competence when learning an L2 (Garcia, 2009). This section discusses the features, advantages, and intervening factors pertaining to adult bilingualism.

Characteristics

Translanguaging. Similar to child bilinguals, adult bilinguals rely on their entire linguistic repertoire in their language practice. In a study examining the composition processes and writing strategies that L2 writers adopted when writing in their L1 and an L2, Wolfersberger (2003) observed three Japanese female adults with limited experience with writing in English. In this study, each participant was required to participate in two writing sections, one in Japanese and the other in English. Wolfersberger found that all three participants relied heavily on their L1; for example, the participants used Japanese to brainstorm when they were writing in English, and when they experienced difficulty in conveying meaning in English during the writing process, they used Japanese expressions first and then rendered them into equivalent English expressions.

Even advanced L2 writers also use their L1 when writing in an L2. Murphy and Roca de Larios (2010) studied seven advanced L2 writers with degrees in English language and literature. Each participant was assigned an argumentative task and a narrative task, and Murphy and Roca de Larios noticed that six participants used their L1 when composing in English. When comparing the two assigned tasks, they also found that the argumentative task entailed more L1 usage, which indicated that different task requirements influenced the use of the L1 and that more challenging tasks with higher demands would require more L1 support.

Translanguaging has also been observed in the inner-thinking process. For example, Schrauf and Rubin (1998) asked 12 adult Spanish-English bilingual participants to provide autobiographical memories in response to word cues. All the participants had been raised in Spanish-speaking cultures and had migrated to the United States 20 to 30 years ago previously. During the study, each individual participated in two sessions, one in Spanish and one in English; was given 50 word cues per session; and was asked to "associate each cue with a specific personal event from the past and to write a few words about the memory in the language of the day" (pp. 445-446). The study's results indicated that the "language of the session was an ineffectual predictor of the effects of language on remembering" (p. 452); for example, the participants may have thought internally in Spanish while writing in English, or vice versa. All the participants were highly proficient in both Spanish and English. Schrauf and Rubin concluded that when the participants were accessing personal memories and had an equal facility in both languages, the unselected language was activated to a considerable degree, while the other language was adopted even in the monolingual mode. In adult bilingualism, the L1 works effectively as an important linguistic tool and functions as a mediator to assist the bilinguals' accomplishment of tasks and assignments involving an L2.

Transmission of literacy. Cummins (1979) proposed the independence hypothesis which suggests that cognitive academic language proficiency would be transferred from one language to another. Cummins also indicated that a threshold of minimum linguistic competence in the L1 was necessary to trigger linguistic advantages in the L2. Therefore, low competence in the L1 typically results in low competence in the L2, whereas high competence in the L1 can predict a similarly high level in the L2.

Abu-Rabia's (2001) study aligns well with Cummins' (1979) independence hypothesis. This study tested 15 Russian-English bilingual students attending a university in Israel, all of whom were studying for a BA in English literature, ranged in age from 25 to 30, and were native Russians. Fourteen tests—seven in Russian and seven in English—were administered to examine three processes in the development of reading skills, including phonological processing, syntactic awareness, and working memory. All the instructions were provided in both Russian and English, and each participant was tested individually. Abu-Rabia found that Russian phonological and spelling skills strongly predicted English recognition, revealing a positive correlation between abilities in the two languages. Because all the students in the study had high levels of proficiency in both languages, their Russian skills facilitated their process of learning English.

In Wolfersberger's (2003) study, all three participants followed well-recognized patterns in both their pre-writing and writing processes when composing in Japanese. However, there was no recognizable writing pattern when using English; furthermore, the essays that were written in English were much shorter and simpler than those in Japanese. Wolfersberger explained that all participants failed to express their ideas appropriately when composing in English, and that L2 writers with low levels of English proficiency usually had difficulty transferring L1 writing strategies to L2 writing. These findings supported Cummins' (1979) independence hypothesis and threshold theory, that is, a minimum proficiency level in an L1 is a prerequisite for transferring L1 linguistic strategies effectively to the L2.

Advantages

One unique benefit of being an adult bilingual is the construction and reconstruction of identity. Learning of a new language is a cognitive activity involving social elements. Communication and creation of effective relationships with speakers of the target language, as well as involvement in meaning negotiation, contributes to the learning process. Through socialization with others, one constructs and reconstructs identities to develop an accepted voice and become a legitimate member of a new language community. Therefore, learning a new language has the potential to build social bridges with speakers of the target language, and the development of bilingualism both affects and is affected by identity construction (Baker, 2011; Shin, 2013).

Pavlenko (1998) analyzed an adult Polish-English bilingual writer's autobiographical narratives and presented the path of acculturation that the writer followed when relocating to an Anglo culture and learning English. This experience allowed the participant to discover a new English self, including becoming accustomed to the use of an English name and finding ways to communicate with American peers to live in and acculturate to the new culture. Pavlenko asserted that exposure to a new language and a new culture facilitated the formation of a new identity for the individual; in this way, identity influences the development of bilingualism while bilingualism influences bilinguals' reconstructions of their own identities.

Intervening Factors

Some bilingualism scholars have found that age does influence adults' bilingual development. Bialystok, Poarch, Luo, and Craik (2014) conducted two separate experiments for younger and older adult monolinguals and bilinguals, and the bilingual participants in that study outperformed their monolingual counterparts in both experiments. In addition, the older bilingual group was found to have considerably more bilingual advantages, and the researchers concluded that both bilingual groups have advantages over monolinguals and that these benefits were more obvious in the older bilingual group.

Adult bilinguals appear likely to achieve a high level of L2 proficiency through formal instruction, and formal language instruction has a strong effect on the development of bilingualism (Garcia, 2009; Pavlenko, 1998). Fox, Cheng, and Zumbo (2014) surveyed 641 L2 students studying in 36 English-language programs at 26 Canadian universities to investigate the impact of English-language programs on L2 students. The students' reports confirmed that the English-language programs had direct and positive effects on their academic and social engagement. As Fox et al. (2014) demonstrated, in addition to promoting language learning and development, language support programs also displayed a vital influence on L2 students' transitions to a new academic culture at universities.

Implications for Teaching

Use of Bilingual Students' L1

Bilingual students' use of their L1 can mediate their academic performances by scaffolding content knowledge comprehension, thereby assisting in the memorization of new vocabularies and similar material. Teachers are recommended to incorporate students' L1 to engage students in learning and to decrease their cognitive overload and anxiety levels. One strategy for integrating students' L1 in the classroom is translanguaging. In Macaro and Lee's (2013) study of Korean-English bilingual students' attitudes toward switching languages, all the participants expressed their preference for and expectations of having Korean included in their English language classes. Consequently, bilingual students' L1 can function as a resource and

as a mediational tool for delivering knowledge (Garcia, 2009; Gort, 2015), and the recommendation is therefore that teachers use translanguaging as an efficient pedagogical strategy.

Integrating bilingual students' L1 in the classroom requires teachers to value bilingual students' linguistic and cultural backgrounds and to incorporate these backgrounds in teaching and curriculum design. Moreover, teachers serve as language planners whom students can access directly. The ways in which teachers practice their own language and interact with students affect students' linguistic and cultural development (Garcia, 2009). Therefore, teachers should accept their own language practices, including translanguaging, and function as linguistic and social models for their bilingual students to allow the students to understand the power of translanguaging.

Positive Ideas About and Attitudes Toward Bilingualism and Bilingual Students

Teachers tend to exhibit different attitudes toward bilingualism and their bilingual students (Baker, 2011; Gort, 2006). On the one hand, some teachers in mainstream classrooms tend to harbor negative attitudes toward their bilingual students, whom they regard solely as the responsibility of ESL instructors. Camlibel and Garcia (2012) conducted a case study of Zehra, a Turkish-English bilingual, and examined the literacy instruction that Zehra received in the mainstream class, the Turkish language class, and the ESL class. Most concerning, the teacher in the mainstream class did not provide any formal literacy instruction for Zehra because the teacher believed that formal instruction in English reading and writing was the ESL teacher's responsibility.

On the other hand, some studies have revealed mainstream classroom teachers' positive attitudes toward and perceptions of their bilingual students. In a quantitative research study, Sullivan, Hedge, Ballard, and Ticknor (2015) examined the relationship between native English-speaking kindergarten teachers and their English learners (ELs) and non-ELs. Most of the 19 teachers who participated in the study spent a significant amount of classroom time on academic materials with their ELs, thereby indicating a willingness to share the responsibility for cultivating ELs with ESL teachers. As Gallo et al. (2014) illustrated, "beliefs about immigrants' language can shape beliefs about the immigrants themselves and this can in turn influence how they are treated" (p. 125); thus, teachers' ideas about and attitudes toward bilingualism and bilingual students have a significant impact on students' language practice and academic performance. A positive attitude influences the ways in which teachers interact with and teach their bilingual students, which contributes positively to their students' academic performance.

Implications for College Instructors With ELs

College ELs face distinctive challenges and difficulties that may hinder their academic development. They may experience difficulty in fully comprehending lectures because of the rapid rate of instructors' presentations, the use of English idioms and abbreviations in the lectures, and many other linguistic challenges. Therefore, college ELs who are highly proficient in communicative English may still struggle with academic English, and they require additional support and extra time to develop the academic language proficiency level necessary for success in educational contexts (Garcia, 2009).

Dense, decontextualized information characterizes academic language, and in academic writing, college students are expected to make their written work conform to the requirements of a particular genre and to adopt a specific stance to entail authority in their field of study (Schleppegrell, 2006). Because of these features of academic language, and with the aim of preparing college instructors to assist ELs' academic language development more efficaciously, Zhang (2020) provided several specific recommendations for college instructors:

clarifying the purpose of the lessons for students, defining the terms used in courses, adopting multiple modes of representations in content delivery (such as pictures, chemical models, and notes), encouraging questions from students (particularly from ELs), providing sufficient opportunities to practice academic vocabulary, considering students' backgrounds in curriculum and teaching, and selecting appropriate textbooks and materials.

Zhang (2020) further recommended that college instructors should constantly reflect on their teaching practice. Reflection upon one's teaching practice entails self-assessment, whereby instructors develop a more exhaustive awareness of how they teach, which allows them to adjust their approaches to meet their students' needs. Accordingly, Zhang suggested that college instructors self-reflect on language practice constantly by audio- or video-recording their own classes, keeping teaching diaries if possible, and collaborating with colleagues to address relevant issues.

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