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Review article

Applicability and value of code-switching in sign bilingual education

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ABSTRACT

Grounded on Peal and Lambert (1962)'s code-switching theory, the purpose of this review is to explore the applicability and value of code-switching in sign bilingual education. The paper conceives code-switching between oral and sign language as sign bilingual code-switching. Literature is replete with studies that promote the validity of hearing code-switching yet there are conflicting conclusions of which some are openly hostile to sign bilingual code-switching. This paper is however posited on a belief that sign bilingual code-switching is applicable and valid in scaffolding learning and language development and in facilitating social interaction in inclusive and sign bilingual education settings. The paper concludes that literature that is opposed to the applicability and validity of sign bilingual code-switching was influenced by the hostile historic beliefs in hegemonic power struggles that often characterize languages and cultures as either dominant or minor. Thus, successful sign bilingual code-switching is that which recognises the equality of oral and sign language and of the hearing and Deaf cultures while at the same time embracing inter-sentential code-switching practices. In these regards, for sign bilingual teachers to successfully use sign bilingual code-switching, they must be proficient in both the dominant oral language and the sign language of that Deaf community. Professional training and regular staff development is recommended in these regards.

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1. Introduction

It is apparent from widespread literature that deaf education is complex and dynamic as evidenced by conflicting discourses about the best ways of educating learners who are deaf. Of late, sign bilingual education has been touted as one of the viable strategies for teaching and learning of deaf learners in inclusive settings. Sign bilingual education is a strategy for educating deaf children by means of the concurrent use of sign and oral languages. In this arrangement, sign language is used as the main medium of instruction while oral language is used for reading and writing (Nussbaum et al., 2012). Sign bilingual education is believed to resonate with inclusion of deaf learners, as it creates opportunities for dual naturalistic input of language in order to trigger early bilingual acquisition of not only the students who are deaf but of hearing students and teachers as well (Tang, 2016). This frames sign bilingual education as part of the process of inclusion of deaf children, since it has been found to be beneficial for both hearing and deaf children (Hsing, 2015). The major impetus for the emergence of sign bilingual education is that it has shown promising results in areas of language and social development as well as academic performance. For these reasons, the World Federation of the Deaf (WFD) (2011) believes that sign bilingual education has potential to address barriers to inclusion of deaf learners and therefore endorses it as the only means by which deaf children in inclusive settings could gain equal opportunities to learning and social interaction. Concurrent language use is central to sign bilingual education as more than one language is used to facilitate communication hence teaching and learning of both deaf and hearing learners.

Various methods exist for concurrent language use in hearing bilingualism which can be adopted for facilitating sign bilingual education for deaf learners and code-switching is one of them. Garcia (2011) confirms that sign bilingualism for the deaf is the same as general bilingualism for the hearing. Similarly Petitto et al. (2001) cited in Davidson Lillo-Martin and Pichler (2013) suggest that deaf bilinguals are very similar to their hearing counterparts. However, sign bilingualism for the deaf is much fluid, richer and complex (Garcia and Cole, 2014). The hearing bilingualism concurrent language use methods that could be adopted for sign bilingual education practice include code-switching, translanguaging, interpretation, translation and transcription. The use of these methods by teachers of the deaf in mainstream schools should be carefully planned and must be pedagogically and linguistically sound, culturally relevant and socially responsive (Riegelhaupt, 2000; Fennema-Bloom, 2010). In effect, language distribution in sign bilingual education should be at the heart of any substantive discussion of these methods in terms of which language to use, when and in what manner (Garate, 2012). According to Swanwick (2016), these methods provide a description of creative ways of blending or alternating sign and spoken languages to provide lexical, semantic and conceptual support for deaf learners in inclusive classes. This paper particularly reviews the use of code-switching in sign bilingual education settings. Literature that promotes sign bilingual code-switching and that which is hostile to it is explored to establish its validity and applicability to sign bilingual education settings.

2. Conceptualising sign bilingual code-switching

Code switching in general entails the act of navigating from one language to another during a discourse or conversational engagement. In this context, code-switching is changing between oral and sign language. Wei and Garcia (2016) see code-switching not only as simply a combination and mixture of two languages but as creative strategies by the language user. It is thus a strategy of facilitating learning by linking prior linguistic knowledge with language and content knowledge targeted for acquisition while helping teachers to more actively construct communicative learning events by sustaining and increasing classroom participation through the use of two languages (Fennema-Bloom, 2010). By definition, code-switching which is also known as code-mixing, code-shifting or code-blending, is the alternation of two languages within a single discourse, sentence or constituent in creative ways (Edvinsson, 2015; Yow and Patrycia, 2013; Samshidi and Navehebrahim, 2013; Hauser, 2000). In sign bilingual settings, code-switching is done between oral and sign languages.

Because many deaf children do not use speech, oral language in sign bilingual education is often in the form of reading and writing. In this paper, code-switching between oral and sign language in inclusive or sign bilingual education settings is referred to as sign bilingual code-switching. Garate (2012) insinuates that sign bilingual code-switching can be used to support developing bilinguals by linking signs to printed information, objects, concepts and definitions. Fennema-Bloom (2010) further explains that code-switching in inclusive classes may include student generated reformations of facilitating comprehension, teacher generated reformations in the act of

facilitating comprehension, established use of class or subject-based technology or institutional bridging where material is presented in say, sign language and defined or expanded in the oral language or vice-versa.

In essence, code switching occurs at both intra-sentential and inter-sentential levels (Edvinsson, 2015). When code-switching occurs at the intra-sentential level, it is called code-mixing, a term which some authors (Van den Bogaerde and Baker, 2006; Yow and Patrycia, 2013; Jamshidi and Navehebrahim, 2013) use interchangeably with code switching. However, Jacobson (1990)'s New Concurrent Approach and Faltis (1996)'s Cue Response System for code-switching both recommend inter-sentential code-switching. The inter-sentential practice is meant to avoid confusion and misunderstanding that may result from interrupted and disintegrated sentences. This is corroborated through an earlier study reported by Riegelhaupt (2000) which found out that only 22% of the participants alternated language at the intra-sentential level with 78% preferring inter-sentential switching as it provides more holistic meanings and expressions. However, the real key to effective use of code-switching is careful and advance planning (Coyle et al., 2010). Riegelhaupt (2000) emphasizes that code-switching cannot just take place anyway in a sentence but at appropriate places. The author further notes that code-switching differs from the kind of language mixing found in early simultaneous and sequential bilingual acquisition whereby the language user arbitrarily switches languages without systematic planning.

3. Practice of sign bilingual code-switching

Literature is limited yet mixed with regards the use of sign bilingual code-switching. According to Hauser (2000) code-switching between sign and oral language is qualitatively different from that between oral languages alone. Results of a study by Emmorey et al. (2005) revealed that deaf children in sign bilingual environments vary code-switching, that is, stop reading or writing and switch to signing and vice-versa. According to these researchers, rather than producing code-switches, deaf children produce code-blends in which signs are simultaneously produced with words 95% of the time on average. Bogaerde and Baker (2006) term this code-blending congruent lexicalization. According to Garia and Cole (2014), this kind of language mixing is a valuable tool for facilitating sign bilingual development. These researchers however observe that deaf children in hearing environments pay little attention to code-switching after all. Contrary to this observation, Davidson et al. (2013) believe that deaf children always show typical bilingual effects including code-switching of different types although they admit that little is known of such deaf linguistic practices. Hauser (2000) concluded that it is possible to code-switch between a sign and oral language since even the functions of code-switching are universal across languages. In their study Emmorey et al. (2013) concur that, while deaf children rarely code-switch, ASL signs occasionally intruded when bimodal-bilinguals communicated with non-signers, suggesting that the deaf are able to code-switch between sign and oral languages.

4. The value of sign bilingual code-switching

Previous research has claimed that code-switching even between oral languages has been perceived as an impure linguistic behaviour which invokes feelings of guilt and shame (Butzkamm, 2003). These feelings of guilt and shame could possibly arise from the view that code-switching is rooted in confusion and tension about it being perceived as being a source of embarrassment (King and Chetty, 2014). Ferguson (2003) in Fennema-Bloom (2010) explains that some literature on bilingual education in general is openly hostile to and often discourages use of code-switching. In a study Shin (2005) describes attitudes towards code-switching as negative but concludes that it is a pragmatic coping tactic in a learning event or social context. Although code-switching as a prevalent pragmatic practice is rarely institutionally endorsed or pedagogically underpinned (Cress and Blackledge, 2010), it has been used throughout the world to scaffold the teaching of additional languages (Garua and Lin, 2016). Cress and Blackledge confirmed that code-switching is a pragmatic response to a classroom context with diverse language needs although Reed and Bapoo (2002) earlier on insisted that it is dilemma-filled. Thus, code-switching is often considered problematic but only when it is seen as somewhat an informal register such that bilingual teachers may avoid it in situations that require formality (Fennema-Bloom, 2010). In the mains, code-switching helps both teachers and students gain confidence in the use of both languages. This is because it creates links between the two languages (Macaro and Jang Ho, 2013) and acts as a scaffold for learning.

Current research has shown that code-switching aids learning and that it benefits second language acquisition and learning as only minorities of commentators today discuss its negative effects (Macaro and Jang

Ho, 2013). The code-switching theory proposed by Peal and Lambert (1962) postulates that switching between languages provides the bilingual individual with a higher degree of mental flexibility and concept formation. Thus, sign bilingual code-switching in this context, functions to increase comprehension and to mark a change in context and therefore to facilitate social interaction and learning in the classroom (Riegelhaupt, 2000). This stands true for both deaf and hearing bilinguals as Kushalnagar et al. (2010) established that deaf children who code-switched between ASL and written English displayed similar advantages associated with bilingualism for hearing bilinguals. After all, code-switching is part of our everyday lives and is a cross cultural phenomenon which is common in bi-cultural communities worldwide (Edvinsson, 2015). Fennema-Bloom (2010) concurs that code-switching in the form of code-scaffolding is a natural part of any form of bilingual instruction which is no different from monolingual scaffolding techniques that are used to facilitate comprehension, hence improve social inclusivity. For that matter, language scaffolding enabled by code-switching in sign bilingual education supports the deaf children in the early stages of using the second language (oral language) in a mainstream classroom (Lewis et al., 2012).

Hauser (2000) notes that sign bilingual code-switching is the principal behaviour through which bilingualism is expressed while Martin-Jones (2007) argues that it offers classroom participation, creative, pragmatic and safe practices between the dominant (oral) language and sign language in which the deaf children for instance have greater access to. In these regards, the pedagogic potentials of code-switching include increased inclusion, participation and understanding of pupils in the learning processes (Creese and Blackledge, 2010). In this way, sign bilingual code-switching helps pupils in the development of less formal relationships, conveyance of ideas and accomplishment of lessons. As such, educators today are increasingly exploring sign bilingual code-switching as a pedagogical strategy for facilitating language and content acquisition and for promoting cognitive and social development (Riegelhaupt, 2000). Fennema-Bloom (2010) also confirms that code-switching is indeed a pedagogic tool used by teachers to make content comprehensible. In another study, Kushalnagar et al. (2010) observes that sign and oral language bilinguals out-performed unbalanced deaf bilinguals in inclusive settings. On these bases, bimodal-bilingualism or sign bilingualism offers a unique vantage point from which to study code mixing or code-switching in deaf children (Emmorey et al., 2005).

The foregoing analysis clearly suggests that the criticism of code-switching is influenced by the hostile historic beliefs in hegemonic power struggles that are often conceive languages and cultures as either dominant minor. Shin (2005) believes that code-switching as a linguistic strategy has been influenced by the socioeconomic dominance of English over minority languages such as sign language. According to Fennema-Bloom (2010) researches on the social implications of classroom code-switching cite it as a hegemonic power play between the dominant language and the lesser valued language. There are also perceptions that code-switching could be used as a tool of power to distribute orders and control the actions among the minority groups (Edvinsson, 2015). After all, there is no research whatsoever that indicates any negative effects of code-switching on linguistic and cognitive development, academic achievement and let alone on social inclusion (Riegelhaupt, 2000). The author explicates that even early studies on code-switching in general have never concluded that it impedes students' abilities to learn and interact. Even for hearing bilingual users of code-switching, neither of the oral languages is actively suppressed (Klaudia, 2013). A study of 15 sign bilingual users by Emmorey et al. (2013) showed no significant difference from 15 monolingual users of code-switching. Thus, asking sign bilingual education teachers not to use sign bilingual code-switching is virtually taking away a scaffold that would help facilitate instruction hence inclusivity of deaf children in the mainstream classroom (Fennema-Bloom, 2010). Another study by Martinez (2010) which examined the complicated multilingual process of code-switching by Filipini sign language interpreters, revealed consistent and on-going code-switching for both monolingual and bilingual users, suggesting the validity of code-switching (Roy and Metzger, 2014) hence sign bilingual code-switching.

5. Discussion and conclusion

This review reveals the dynamic and complex nature of sign bilingual code-switching. While code-switching almost naturally occurs between oral languages, it is more sophisticated when sign language is involved. This is because oral and sign language use different modalities. Earlier literature undermined sign bilingual code-switching because of misunderstanding of the practice and values of sign bilingual education. Sign bilingual education is relatively new so are the growing efforts in the use of code-switching between oral and manual modalities. In this context, current research portrays sign bilingual code-switching positively based on its advantages which mirror those of sign bilingual education. To ensure the validity of code-switching between sign and oral language,

teachers should therefore avoid switches that devalue the learner or the minority native language, in this case, sign language. Examples of such switches include those that disregard a correct answer or give a negative feedback to a deaf student, based on the language of reply, those that undermine the attitudes of the deaf students toward their native language which is sign language and their Deaf culture or those that perceive the solidarity of the patrimony of deafness negatively. Therefore, successful sign bilingual code-switching is that which recognises the equality of oral and sign languages and of the hearing and Deaf cultures while at the same time embracing inter-sentential practices. In these regards, for sign bilingual teachers to successfully use sign bilingual code-switching, they must be proficient in the dominant oral language as well as in sign language and be conscious of both the hearing and the Deaf cultures of their students. Professional training and regular staff development is recommended in these regards.

References

- Butzkamm, W., 2003. We only learn language once. The role of the mother tongue in FL classrooms: death of a dogma. *Lang. Learn. J.*, 28, 29-39.
- Coyle, D., Hood, P., Marsh, D., 2010. CLIL: Content and language integrated learning. Cambridge: Cambridge University Press.
- Creese, A., Blackledge, A., 2010. Translanguaging in the bilingual classroom: A pedagogy for learning and teaching. *Mod. Lang. J.*, 94(1), 103-114.
- Davidson, K., Iillo-Martin, D., Pichler, D.C., 2013. Spoken English language development among native signing children with cochlear implants. *J. Deaf Stud. Deaf Educ.*, 19(2), 238-250.
- Edvinsson, C.M., 2015. Teacher code-switching in secondary ESL classrooms in Sweden: A study of one teacher's use of code-switching. www.lup.lub.lu.se/student_papers/record/8728449/file/8837738
- Emmorey, K., Borstein, H.B., Thompson, R., 2005. Bimodal bilingualism: Code-blending between spoken English and American Sign Language. In Cohen, J., McAllister, K.T., Rosland, K., MacSwan, J. (eds.), *Proceedings of the 4th International Symposium on Bilingualism*. Somerville, MA: Cascadia Press.
- Emmorey, K., Petrich, J.A.F., Gollan, T.H., 2013. Bimodal bilingualism and the frequency-lag hypothesis. *J. Deaf Stud. Deaf Educ.*, 18 (1), 1-11.
- Faltis, C., 1996. Learning to teach content bilingually in a middle school bilingual classroom. *Biling. Res. J.*, 20(1), 29-44.
- Fennema-Bloom, J.R., 2010. Code-scaffolding: A pedagogic code-switching technique for bilingual content instruction. *J. Educ.*, 190(3), 27-35.
- Garate, M., 2012. ASL/English bilingual education: Models, methodologies and strategies. *Visual Language and Visual Learning Research Brief*, 2(8), 1-8.
- Garcia, O., 2011. *Bilingual education in the 21st century: A global perspective*. London: Wiley-Balckwell.
- Garcia, O., Cole, D., 2014. Deaf gains in the study of bilingualism and bilingual education. In Bauman, H.L., Murray, J.J. (eds). *Deaf gain: Raising the stakes for human diversity*. Minneapolis: University of Minnesota Press.
- Garcia, O., Lin, A.M.Y., 2016. Translanguaging in bilingual education. In Garcia, O., Lin, A.M.Y. (eds.), *Bilingual and multilingual education*. *Encyclopaedia of Language and Education* (Vol. 5). Dordrecht: Springer.
- Hauser, P., 2000. Code switching: American Sign Language and cued English. In Metzger, M. (ed.), *Bilingualism and identity in deaf communities*. Rochester: RIT Scholar Works.
- Hsing, M., 2015. *The impact of sign bilingual inclusive program on deaf and hearing young children in Taiwan*. Taiwan: National University of Tainan.
- Jacobson, R., 1990. Allocating two languages as a key feature of a Bilingual Methodology. In Jacobson R., Faltis, C. (eds). *Language distribution issues in Bilingual Schooling* (Clevedon, UK: Multilingual Matters), 3-17.
- Jamshidi, A., Naveherbrahim, M., 2013. Learners' use of code switching in the English as a foreign language classroom. *Aust. J. Basic Appl. Sci.*, 7(1), 186-190.
- King, J.R., Chetty, R., 2014. Code-switching: Linguistic and literacy understanding of teaching dilemmas in multilingual classrooms. *Ling. Educ.*, 25, 40-50.
- Klaudia, K., 2013. The benefits of sign language for deaf children with and without cochlear implant(s). *Eur. Sci. J.*, 4, 341-349.

- Kushalnagar, P., Hannay, H.J., Hernandez, A.E., 2010. Bilingualism and attention: A study of balanced and unbalanced bilingual deaf users of American Sign Language and English. *J. Deaf Stud. Deaf Educ.*, 15(3), 263-273.
- Lewis, G., Jones, B., Baker, C., 2012. Translanguaging: Developing its conceptualisation and contextualisation. *Educ. Res. Eval.*, 18(7).
- Macaro, E., Jang Ho, L., 2013. Teacher language background, codeswitching, and English-only instruction: Does age make a difference to learners' attitudes? *TESOL Q.*, 47(4), 717-742.
- Martínez, R.A., 2010. Spanglish as literacy tool: Toward an understanding of the potential role of Spanish-English code-switching in the development of academic literacy. *Res. Teach. Eng.*, 45(2), 124-149.
- Martin-Jones, M., 2007. Bilingualism, education and the regulation of access to language resources. In: Heller, M. (eds) *Bilingualism: A social approach*. Palgrave Advances in Linguistics. London Palgrave.
- Nussbaum, D.B., Scott, S., Simms, L.E., 2012. The "why" and "how" of an ASL/English bimodal bilingual program. *New Dir. Deaf Educ.*, 13, 14-19.
- Peal, E., Lambert, W., 1962. The relation of bilingualism to intelligence. *Psychological Monographs*. 76, 1-23.
- Riegelhaupt, F., 2000. Code switching and language-use in the classroom. In Roca, A. (Ed). *Research on Spanish in the U.S.*, 204-217. Somerville, M.A: Cascadilla Press.
- Roy, C., Metzger, M., 2014. Researching signed language interpreting: Research through a sociolinguistic lens. *Translation Interpreting*, 6(1), 158-176.
- Swanwick, R., 2016. Deaf children's bimodal bilingualism and education. *Lang. Teach.*, 49(1), 1-34.
- Tang, G., 2016. Sign bilingualism in deaf education. In Garcia et al. (Eds) *Bilingual and Multilingual Education*. Encyclopedia of language and education. DOI: 10.1007/978-3-319-02324-3_35-2
- Van den Bogaerde, B., Baker, A.E., 2006. Code mixing in mother-child interaction in deaf families. *Sign Linguistics*. <https://www.uva.nl/binaries/content/documents/personalpages/b/a/a.e>
- Wei, L., Garcia, O., 2016. From researching translanguaging to translanguaging research. In King, K. et al. (eds.) *Research methods in language and education*. Encyclopedia of Language and Education. http://dx.doi.org/10.1007/978-3-319-02329-8_16-1
- World Federation for the Deaf (WFD), 2011. *Bilingualism as a basic human right for deaf children in education*. Rome: WFD.
- Yow, W.Q., Patrycia, F., 2013. *Challenging the linguistic incompetency hypothesis: Language competency predicts code-switching*. Singapore: International Design Center (IDC).

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