BILINGUALISM AND SIGNWRITING

BILINGUISMO E ESCRITA DE SINAIS

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Abstract: Current methods for educating deaf children through English as a second language need to be examined in order to provide assistance in obtaining English literacy. Although special education settings and the development of language theories and development of bilingual education for the deaf still present an unsatisfactory picture, many adolescents and deaf adults have their reading comprehension skills at the 4th or 5th grade level. It is important that educators understand how the learning process of deaf children occurs to improve their strategies within classrooms. As a result, educators will be able to use appropriate teaching and encourage deaf students to be whole people, who know how to express themselves in sign language and SignWriting. This article provides a new perspective on the approach of bilingualism for the deaf in the insertion of SignWriting in the education of the deaf. This article addresses the collaboration of SignWriting theories and understanding the effectiveness of Sign Writing (SignWriting), providing the scientific findings that will justify the teaching of SignWriting for deaf children. This study examined literature reviews and theories on bilingualism: SignWriting. Our studies are based on Andrews (2012); Holt (1994); Musselman (2000); Hoffmeister, Philip, Costello, & Grass (1997); Prinz & Strong (1998); Singleton, Supalla, Litchfield, & Schley (1998).

Keywords*: Language; SignWriting; Bilingualism.

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Resumo: Métodos atuais para educar as crianças surdas através do inglês como segunda língua precisam ser examinadas a fim de fornecer assistência na obtenção de alfabetização em inglês. Apesar das colocações da educação especial e do desenvolvimento das teorias de linguagem o desenvolvimento da educação bilingue para surdos, ainda apresentam um quadro insatisfatório, muitos adolescentes e adultos surdos possuem suas habilidades de compreensão de leitura no nível da 4ª ou 5ª série. É importante que os educadores compreendam como ocorre o processo de aprendizagem das crianças surdas para melhorar suas estratégias dentro das salas de aula. Como resultado, educadores serão capazes de usar o ensino adequado e incentivar os alunos surdos a serem pessoas inteiras, que saibam como expressar-se em linguagem gestual e escrita de sinais. Este artigo fornece uma nova perspectiva sobre abordagem de bilinguismo para surdos na inserção de escrita de sinais na educação de surdos. Este artigo aborda a colaboração de teorias de escrita de sinais e compreensão da eficácia da escrita, fornecendo as descobertas científicas que justificarão o ensino da escrita de sinais para crianças surdas. Este estudo examinou revisões de literatura e teorias sobre o bilinguismo: SignWriting. Our studies are based on Andrews (2012); Holt (1994); Musselman (2000); Hoffmeister, Philip, Costello, & Grass (1997); Prinz & Strong (1998); Singleton, Supalla, Litchfield, & Schley (1998).

Palavras-chave: Linguagem; Escrita de Sinais; Bilinguismo.

Bilingualism and Signwriting

Current methods for educating Deaf children who are struggling to learn English as a second language or English Language Learners (ELL) need to be examined in order to provide assistance in achieving English literacy. It is important that educators understand how Deaf learners learn and read languages in order to improve strategies within classrooms. As a result, they will be able to use the proper teaching in encouraging Deaf students to be a whole person who understand how to express in sign language and SignWriting in their native language. This study examined literature reviews and theories about bilingualism: SignWriting.

In spite of special education placements, development of language theories, the development of Deaf bilingual education, many Deaf teenagers and adults are severely delayed; their reading comprehension skills usually plateau at the 4th or 5th grade reading level (Andrews, 2012; Holt, 1994; Musselman, 2000). In recent years, there has been a tremendous interest among researchers in the bilingualism field. This article provides new perspective on Deaf bilingualism approach because this approach is under-

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A topic that continues to have high priority in educational research is the investigation of Deaf students' experiences of learning to read and write. There are a lot of evidence has been demonstrated positive cognitive and literacy benefits of early bilingualism. For example, among ASL-English bilingual deaf adults, many researches have repeatedly reported a positive correlation between ASL capability and reading comprehension skills (e.g., Hoffmeister, Philip, Costello, & Grass, 1997; Prinz & Strong, 1998; Singleton, Supalla, Litchfield, & Schley, 1998).

Exposure to sign language at a very young age (i.e., during infancy) accrues significant and long-lasting linguistic and cognitive benefits to young deaf children (Mayberry & Eichen, 1991). One explanation for these benefits comes from research into the impact of early language (visual or auditory) on the developing brain that has shown that the regions of the brain involved with the phonological processing of a sound-based language are identical to those involved in the phonological processing of a visually based language (Petitto et al., 2001)

Both educational and cultural variables should be considered when attempting to

understand the process by which a second language is learned; the role of classroom dynamics and the learning environment are important in motivating students to improve their SLA in a formal context (Dornyei, & Ushioda 2009; Far, Rajab, & Etemadzadeh, 2012; Gardner, 1985, 2006; MacIntyre, Noels, & Moore 2010). Students with English deficiencies often show that they can improve their English skills through motivation (Gardner, 1985, 2006).

The Deaf bilingual classroom practices frequently overemphasize the use of ASL-only techniques for social discourse in Basic Interpersonal Communication Skills (BICS) and English-only techniques for written academic discourse in Cognitive Academic Language Proficiency (CALP) (Delana, Gentry, & Andrews, 2007) was introduced by Jim Cummins (1994). Cummins claimed that an "underlying linguistic proficiency" exists and crosses between all languages. The acquisition process of a second language is contingent on the linguistic development of learners' first language. Students' linguistic skills and proficiencies in their first language (L1), when allowed to develop and reach higher threshold levels, would not only better prepare linguistic minority students with academic cognitive demands of learning a second language but would also transfer to linguistic competency development in students' L2 (Cummins, 2000).

In addition, many deaf students do not seem to "own" both languages, and tend to view ASL as their primary language even though they may use both languages in their everyday lives and will continue to do so through adulthood (Grosjean, 2002). However, these students still need to learn English as a second language, which is an essential part of their life. According to Delana et al. (2007) "… 39.5% of students are exposed to 'speech and sign' and 11.2% to 'sign only'; readers must guesstimate the amount of ASL usage among the remaining 50.7% of deaf students using some type of manual system" (p. 76).

Joe Martin wrote a research paper at Western Washington University based on, "A Linguistic Comparison Two Notation Systems for Signed Languages: Stokoe Notation & Sutton Sign Writing. His research paper was main focus on comparing two systems that are design for signed language writing. Martin (2000) similarly reviews

dozens of research findings. He writes, "William Stokoe himself says in the *Dictionary of American Sign Language on Linguistic Principles*, (hereafter the DASL), that "For the reader who knows American Sign Language, the symbolic notation will suffice." For the linguists perspective on Stokoe's Dictionary American Sign Language is not sufficient due to many areas are missing such as, non-manual, location and movement. However, nor was it a popular script, as it recorded only isolated single words. It was created for a particular, specific purpose-to describe ASL linguistically-and for that it worked very well (Martin 2000). According to Martin (2000, p.8) mentions, "When SignWriting (SSW) was invented in 1974 there was no longer a need to prove that signed languages were actually languages, the goal was simply to record them." The Stokoe and Sutton's theories are that signwriting works. And new discoveries continue to be found. Indeed, their works were focus on analyze, jot down and record them. It led to researchers to create the signwriting.

    This article wrote by Silvestre, N., Ramspott, A., & Pareto, I. D. (January 01, 2007). There have been very little studies on conversational skills and self-concept. Since language acquisition is important for Deaf children, there is a lot of coverage on that. However, conversational skills have been lacking due to number of different reasons. Silvestre, N., Ramspott, A., & Pareto, I. D. (January 01, 2007) state, "In an inter individual adult/student relationship, moments when each person speaks are clearly structured, so difficulties in taking turns to speak or the possibilities of losing the thread of the conversation or for overlapping were very scarce." It shows how much challenge for deaf children to speak and learn how to take a turn to have conversation due to misunderstand from each other or don't understand the individual's comments. In addition, Silvestre, N., Ramspott, A., & Pareto, I. D. (January 01, 2007" quoted, "Also, we have identified the most common difficulties faced by deaf pupils in the given context and highlighted the conversational skills that are of most use in the communicative situation." It is great example how much it is significant for deaf children to access their primary language without losing the significant information. Sign Language is the best

answer. Also, Sign Writing will significant help them a lot to access the language in written.

Shaira wrote his dissertation based on signwriting vocabulary at Deaf school in Jordan. His theory is based on signwriting. The findings based on his research using two groups: Control group and experiential group. The research showed that these students in the experimental group did better in reading and writing opposed to these students in the control group. Basically, using signwriting along with sign language is more accurate and comprehensible rather than using sign language along with spoken language because it is not natural to deaf children. Shaira (2007, pg. 27) states, "Teaching using the method of Sign Writing focuses on a dual-language approach, which considers Sign Language to be the mother language of the deaf and the spoken language is the second language. It shows an evidence how much it is significant for deaf children to access both languages. In addition, Shaira (2007, pg. 27) points out, "It is also apparent here that Sign Writing helps to give the complete meaning and at a high level of clarity." He mentions previous quote to show great benefit for deaf children to sign and write and they both have connection in meaning. It does apply to spoken language and spoken language in written. Shaira (2007, pg. 28) evidences, "This is exactly why the availability of the written lesson reduces the misunderstanding of signs as much as possible, if not stopped. Adding more to the student's vocabulary helps to improve the academic achievement, as was pointed out by Bauman and Kaem'enui, 1991." This is strongly evidence to reduce the missing information by having primary language in written. It is much more sense for deaf children to use sign language and written in their own primary language. That helps them a lot by understanding their primary language. Then use second language in reading and written. They will always have an opportunity to code switch to their primary language to be able to connect the meaning on phrase(s) or vocabulary/ies.

John Reyhner's theory is provide the mother of tongue in reading and writing that will reduce learners with first language to barrier to learn second language due to ability to use primary language to support second language. Reyhner (1989) states, "The community school studies by McLaughlin reduced the cultural conflict between the

community and school with a model K-12 Navajo-English bilingual/biliterate/bicultural/bicognitive education program that introduced English in kindergarten but taught reading and writing in Navajo as well as continued the use of Navajo literacy and continued the use of Navajo literacy right up through high school (Reyhner, 1989). The previous quote is completely same with deaf children if they are able to use their primary language for reading and writing. For sure, it will reduce their deaf cultural conflict. In addition, it will increase them to thrive, boost their self-esteem, increase their cooperative learning and can challenge the high expectations in academic.

In collaboration with Scandinavian educators in Denmark who worked with Deaf students, linguists investigating features of natural sign languages, and a group of ASL native signers here in the U.S., Sutton's SignWriting has evolved into a writing system used internationally. SignWriting symbols are currently used for linguistic, educational, computational, artistic, and conventional communication purposes representing fourteen different natural sign languages.

An important aspect that supports DHH students' exploration with SignWriting symbols is the potential impact the experience may have on lowering an operative affective filter that inhibits second language acquisition of written English. Genuine smiles, that require fully flexed cheek muscles, may emerge as evidence that DHH students can self monitor and lower an operative literacy learning affective filter.

SignWriting is based on teaching the deaf in their native language (Sign Language). This method eliminates forcing the student from dealing with the problems associated with spoken language. For it is such problems that contribute to the deaf student's inability to thrive academically as a result of their deficiency in hearing and inability to speak. It is this very issue that is apparent to all those who work with the hearing impaired and deal with them on a regular basis. It is through the researcher's own experience, in this field, continuously listening to the complaints of the teachers, and their independent attempts to resolve such issues, without any supporting research, that this problem was noticed.

The cinematic language and the narratives of fables in Sign Language may be

related to aspects of imagery and building from there, it was proposed that the fables can be translated into Sign Language from Portuguese preserving what they have in common in terms of imagery, so the language of cinema and the narratives of fables in Sign Language may be related to aspects of imagery narratives. It is proposed that the fables and tales can be translated into Sign Language from Portuguese preserving what they have in common in terms of imagery, so the Sign Language educators and interpreters, both deaf and hearing, may use it to provide deaf students with cognitive development.

According to André Setaro (2003), "The cinema communicates, it is a language. As authors use the words, sentences, paragraphs, accents and punctuation marks to write, the movies also have its elements to organize the "talks". We call this as syntax. Thus, the basic elements of the language of cinema to be considered in a narrative in Brazilian Sign Language – Libras are: the environment, the plan, the camera movement and editing. According to André Setaro (2003): "It is necessary to learn how to recognize the language of cinema in order to understand it.

Assuming that the deaf people live under visual experience of life (Skliar, 1998 p.11), the images and visuality should always be emphasized in Sign Language productions, especially in the translation of fables and tales, which are significant texts and need well-built imagery components for "viewing" the stories. In Brazil, the majority of fables and tales are registered in Portuguese, and its translation in an appropriate way from Portuguese to Libras is a real challenge. In this country, deaf children's values and principles that constitute them as people and citizens are under development. Thus, the way Sign Language translations of fables and tales are make is a very important topic, and so it must be done as imagery productions, so the students can "view" the stories and then develop themselves cognitively and constitute their values according the images they "see" as it is being narrated. To built a very imagery Sign Language production is necessary to use strategies and linguistic resources from Brazilian Sign Language and also from language of cinema as plans, classifiers, editing, movements and effects. These resources will make possible to produce real "viewing" stories, their time and space, the characters, the concatenation of the facts and the chain of events. In this way, also the

narrative rhythm and even the eventual emphasis will be possible and the productions certainly will not be merely lexical, linear and monotonous. Thus, "viewing" narratives in Brazilian Sign Language will be full of meaning and easy to be understood.

Considering the importance of these resources, they should be prioritized in the training teachers programs, as so the interpreters and other education professionals training programs in order to make the Libras productions as a form of communication and expression for the deaf. These considerations turn efficient the educational systems and their methodological proposals can achieve satisfactory results among deaf students. , For these students, a good education depends fundamentally from the efficiency of their teachers Sign Language productions, as well as the interpreters and other education professionals involved in this process.

This study hopes to contribute in this process, demonstrating there are an intrinsic relationship between the imagery aspects of the fables and tales Sign Language productions for the deaf, suggesting that the language of fables and tales must be translated into Libras to allow maximum "view" the story and thus enforcing the ultimate goal of children's stories, which is to provide them cognitive development by the formation of values and hence the constitution of their subjectivities as people.

Theoretical Framework

This study was established based on four theoretical foundations. The first was bilingualism. The second was on biliteracy development. And the third was the learning language by playing with second language. The third was about visualization in the language by using media as demonstration.

Bilingual theorists and educators have addressed the affective domain of second language learners. Krashen (1982) introduced the notion of an "affective filter" related to second language acquisition processes. Educators responsible for creating second language learning environments need to recognize and consider the effect anxiety and feelings of incompetence have on the language learning process. The monitoring of an

affective filter was initially introduced as a factor applicable to adult second language learners. Children learning a second language are not expected to encounter an affective filter. Krashen (1984) does propose, however, that Smith's condition hypothesis for the acquisition of writing (Smith, 1983, p.562, cited in Krashen, 1984) is compatible with his affective filter hypothesis. Relevant to developing writing competency by both adults and children, Smith claimed that readers acquire a writer's code. The acquisition of that writer's code is contingent on two factors: first, acquisition of the code is possible when the expectation of success prevails over expectations that learning will not take place; and second, when readers consider themselves to be a member or at least a potential member in the "club" of writers. Smith continued, "The exclusion from any club of learners is a condition difficult to reverse, whether we impose it on ourselves or have it imposed on us" (Smith, 1983, p.562, cited in Krashen, 1984). DHH students have been socialized to believe that learning to read and write English is hard and that they will never be really good at it. While the factors contributing to this belief have yet to be fully investigated, it has been suggested that English dominant monolingual educational programs have denied DHH students' access to equitable education (Johnson, Liddell & Erting, 1989). While the implementation of bilingual programs attends to the full development of ASL linguistic and cultural competencies and the development of second language literacy skills in English, membership in an English "writers club" for DHH students cannot be guaranteed.

A biliteracy framework (Street & Hornberger, 2008) provides bilingual educational program designers a more unified understanding of biliterate contexts, biliterate development and biliterate media. This model of biliteracy frames and complex continua was chosen to guide the discussion and the implementation of biliteracy educational contexts for Deaf and Hard of Hearing students. The main tenant of this sociocultural theoretical biliteracy model is the interrelatedness of the notion of biliteracy. In contrast to the varied and conflicting literacy perspectives proposed by different disciplines, Street and Hornberger (2008) uses a complex set of nine continua to illustrate a unified and more complete framework for literacy. For each of the three major

frames there are three additional continua constructs: biliterate contexts (micro-macro, oral- literate, monolingual-bilingual), biliterate development of the individual (reception-production, oral language-written language, L1-L2 transfer), and biliterate media (simultaneous-successive exposure, similar-dissimilar structures, convergent-divergent scripts).
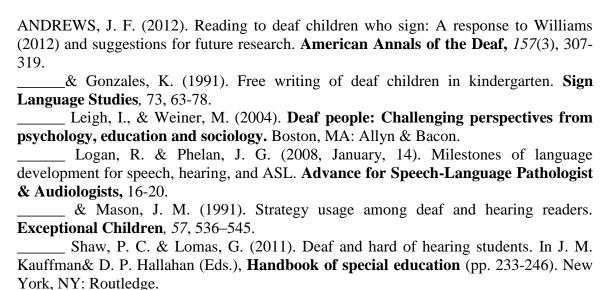
Street and Hornberger (2008) presents this set of nine complex continua, identifying them and organizing them using labels that frequently appear in the literature associated with bilingualism and literacy. The suggested way to understand the interrelatedness of these labels is that there are no end points or static relationships between continua but rather energized movement along each and every continua. Each frame is best understood not as separate and distinct from one another but rather as a whole set, that is, each nested one on the other. The related continua for context, development, and media share the same feature of interrelatedness fostering discussion that reflects the real life movement of reflective thought about bilingual and biliterate experiences of individuals and groups of individuals as opposed to theory driven polarized end points. The discussion of the academic literature that supported the exploration and implementation of biliteracy experiences for Deaf and Hard of Hearing students using SignWriting will follow the suggested frames, not to be "boxed" by them, but rather to tap into the energized inter- related notions presented. Hornberger cautions educators that attending to any one of the nine continua in isolation will result in an incomplete understanding of biliteracy. This biliteracy framework provided the necessary structure that bids bilingual educators to break away from isolating notions of bilingualism and literacy development. In particular, the invitation is extended to bilingual bicultural proponents for DHH students who support the academic and cultural recognition of American Sign Language as DHH students' first and natural language. Hornberger's third frame, media--exposure, structure and script-- challenges bilingual bicultural proponents for DHH students to investigate literacy as a sociocultural practice that allows for the active consideration of a writing system for ASL to be used in literacy development programs.

Perhaps a brief discussion of why consideration of this third frame is so significant and radical during this transition period, motivating the pedagogical shift from monolingual to bilingual education in the field of Deaf Education, is in order. Two educators of deaf children, Ed Basso and Marlon Kuntz (1994) appealed to Freire and Macedo's model of "emancipatory literacy," the sociopolitical theoretical framework in their work, Literacy: Reading the Word and the World (Freire & Macedo, 1987), to justify the impending radical change in literacy programs for deaf students. Basso and Kuntz select and relate Freireian themes to the experience of deaf students. Deaf learners need to reclaim voice through ASL use, which up until the present, has been ignored in English monoliteracy program goals. Empowering deaf students to be critical thinkers and problem-solvers, capabilities excluded from traditional mechanical skill oriented curriculums, is made possible through ASL dialogue. ASL is a natural language, which is biologically accessible and readily comprehensible for deaf students. Adopting Freireian sociopolitical themes would foster recognition within deaf students that they can be agents of change. This recognition comes with a new confidence to "read the world," that is, understand their environment, which holds past and present histories. The Freireian theme the authors emphasize most is the need to challenge deaf students to restructure those histories by assuming authorship, an empowered "writing the world," which for deaf students means control of their social future. These two educators claim that in order for programs for deaf students to truly reflect an empowered and emancipated literacy that dynamically links the "world and the word," an acknowledgment is necessary that this can only be achieved by identifying literacy in two languages, ASL and English. The authors' plea for emancipated and empowered biliteracy use does not include any description of what ASL literacy might entail. Nonetheless, the reader assumes that emancipated literacy for deaf students means reading the world through two languages, one with and one without written words. What if the theme of emancipation and empowerment is extended to include a way to read and write signs? Would advocates for bilingual literacy consider the possibility that deaf students can help define ASL literacy

by learning a systematic orthography, SignWriting, that codifies the language they do use to dialogue, problem solve, and construct their own voice, history and future?

For deaf students and the professionals who work with them, a critical understanding of literacy means acknowledgment of the potential tension that exists between ASL, the cultural literacy dimension, and written English, the literacy code of the dominant society. Hornberger's biliteracy frames include continua that address this critical understanding of an energized, not polarized, tension between languages, oral and literate contexts, oral and written development of L1 and L2. Professionals may claim that additional biliterate tools for authorship are desirable for the emancipated literacy development of DHH students, including recognition of an ASL literacy. Many educators of deaf students, however, still hold onto the belief that ASL does not have and cannot have a written component. If this belief is left unchallenged, Hornberger's third frame, biliterate media considerations for two languages, would remain unexplored, resulting in a diminished and incomplete understanding of potential biliterate experiences available to bilingual DHH students. Using SignWriting, DHH students can "write the world," that is, express themselves using their own cultural language, ASL.

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