

Spoken language bilingualism for deaf students: Parental decision-making

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Abstract: Language has always been at the core of our practice in deaf education, but in the current context, it is time to explore new language possibilities for deaf students. Over the past two decades, the combination of widespread implementation of universal newborn hearing screening (UNHS) and early amplification with hearing technologies, including cochlear implants (CIs), has afforded meaningful access to spoken language during the critical language development period for most deaf children. Early interventionists and educators have taken a new perspective of encouraging spoken language bilingualism in home languages and the majority language. This shift has opened doors to education in spoken language bilingual settings (e.g., French immersion), doors formerly closed to deaf students. This paper presents some preliminary qualitative data, highlighting parent decision-making, from a mixed method case study of deaf Francophone participants (N = 4) enrolled in grades 4-12 at French minority schools in southern Ontario.

Keywords: deaf; bilingualism; spoken language; cochlear implants

1 Introduction

In early childhood, during the optimal time for language acquisition, hearing children from bilingual homes can typically become fluent in more than one language with no special instruction. Despite this, second language learning has been viewed with skepticism among some educators concerned that a second language would interfere with first language learning, and this is especially the case with deaf² learners (McConkey Robbins et al., 2004). Historically, spoken language bilingualism has not been a feature of deaf education, and the notion that deaf students could learn a second spoken language was dismissed as an impossibility (Bolen, 1981; Meadow-Orlans et al. 2003). Hearing technologies 100 years ago were primitive (e.g., ear trumpets), and even in the mid-1980s, hearing aids were often body-worn and provided little access to the high frequency sounds that are most important for discriminating speech. Given the challenges in developing competence in even one spoken language, bilingualism in two spoken languages was not entertained as an option.

However, in the current context, given a shift to universal newborn hearing screening (UNHS) for early identification of hearing loss and improved access to spoken language through

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² The term *deaf* is used refer to any individual identified with a hearing loss, from mild to profound, irrespective of the use of amplification or cultural affiliation (i.e., Deaf with a capital D refers to members of a culturally Deaf community).

hearing technologies, parents of deaf children need to be made aware that spoken language bilingualism is now an option. There are well-known cognitive, social, and employment advantages to being bilingual, particularly in a bilingual country like Canada, and deaf individuals should have the opportunity to accrue these benefits. In a 2014 article criticizing Canadian policies in bilingual education, Cummins argued that deaf children with cochlear implants were being denied bilingual language learning in a signed and a spoken language (i.e., American Sign Language and English). While recognizing the concerns he raises with respect to the lack of support for sign-spoken bilingualism and the value of acquiring a natural signed language (see Knoors & Marschark, 2012 for a discussion), it was equally the case that spoken language bilingualism was not encouraged for deaf children. Over the course of my career as a preschool home visiting teacher of the deaf, I have worked with many families who had to make language decisions related to the use of the home or the majority language; what might be possible for their deaf child; and whether bilingualism was a viable option. Informed by this perspective, the focus of this paper is on spoken language bilingualism and the parental decision-making process regarding language choice.³

2 Changed and changing context

Beginning around 2000, Ontario began implementing a program of early identification of hearing loss through the Infant Hearing Program (Durieux-Smith et al., 2000) and by 2007, depending on where families live (i.e., urban or rural settings), access to varying levels of early hearing and detection intervention programs has been available in most provinces (Durieux-Smith et al., 2008; Bagatto et al., 2020). Approval of pediatric cochlear implants by Health Canada occurred in 1990 and as of May 2011, 2,100 to 2,350 children had received an implant in Canada through a combination of government funding, hospital funding, and philanthropy (Hanrahan, 2011). A significant shift in language acquisition norms was effected because of the numbers of deaf infants in Canada who received early access to high performance listening technology (i.e., digital hearing aids, cochlear implants) and, as a consequence, much earlier meaningful exposure to spoken language (Archbold, 2010; Archbold, 2015; Archbold & Mayer, 2012; Mayer & Trezek, 2015).

To acquire a language, children must have access to four conditions: 1) quantity and quality of exposure, 2) to accessible language, 3) through meaningful interactions, 4) with capable users (Mayer, 2007; Mayer & Trezek, 2015). Of these, accessibility has been the primary challenge for deaf children. While signed languages (e.g., ASL) are fully accessible, over 95% of deaf children are born to hearing parents (CDC, 2018; Mitchell & Karchmer, 2004) who are typically not capable users of a signed language and thus not readily able to engage in linguistic interactions with their child from birth. For these families, spoken language acquisition through hearing technologies affords a more expeditious route, allowing for meaningful interactions with parents and caregivers in the language of the home—the language they know and are most comfortable using during the optimal period of language development.

The authors of a longitudinal study of 470 deaf children in Australia reported that through early intervention, parental involvement, and early effective device fitting, “language delay in children with permanent childhood hearing loss (PCHL) is abatable, or in some cases, completely preventable” (Ching et al., 2018, p. S107). When compared to the average age of identification

³ While the focus of this paper is on spoken language bilingualism, the author recognizes the ongoing debate in the field as to communication modality and approaches (e.g., Hall et al., 2019; Mayer & Trezek, in press; Mellon et al., 2015; Smith & Wolfe, 2016).

prior to the UNHS programs, this group of students received access to language nearly 5 years sooner than their peers from the 1990's. Overall, given near-equal access to spoken languages through strong early intervention and consistent use of hearing aids and cochlear implants, deaf students may achieve linguistic parity with their hearing peers, altering the educational context for becoming a bilingual.

3 Spoken language bilingualism

As was the case with deaf students (Bolen, 1981; Meadow-Orlans et al., 2003), other students with special education needs (SSEN) were excluded from French minority schools (Parisot & Rinfret, 2012; Genesee & Fortune, 2014), French immersion programs, and core French classes (Willms, 2008; Mady & Arnett, 2015; Muhling & Mady, 2017; Delcourt, 2019). Students considered “at risk” in academic second language learning settings included immigrants, Canadian-born multilingual (ELL) students and students with learning difficulties (Arnett & Mady, 2018; Genesee, 2007). In his 2007 review of the research evidence, Genesee argued that:

Ethical issues arise because to exclude students who might face difficulty in immersion from participation in these programs is to deprive them of access to what is arguably the most effective form of second language (L2) education and, in turn, from an important life- and job-related skill, namely, proficiency in French (2007, p. 657).

He goes on to say, bilingualism is important not only in the Canadian context but also in the international context, given the globalization of the economy and of employment opportunities (Genesee, 2007, p. 657).

While Genesee was not making an argument specific to deaf learners, the notion of exclusion is not a new one in these mainstream bilingual settings (Paradis, 2007; Genesee & Lindholm-Leary, 2008; Genesee & Jared, 2008; Genesee & Fortune, 2014). That said, there has been a shift in thinking so that deaf students are no longer exempted from taking courses in French or any other heritage language. Mainstreamed settings are facilitating second spoken language learning, and multilingual families are encouraged to speak the minority language of the home. As well, there is a growing body of research evidence detailing the benefits of spoken language bilingualism for deaf learners (Bunta & Douglas, 2013; Bunta et al., 2016; Guiberson, 2013; McGlew, 2013; Crowe & Guiberson, 2021; see Simpson & Mayer, 2023 for a discussion).

Bunta and Douglas (2013) conducted a retroactive study examining the data from Spanish-speaking families whose children had been given cochlear implants (i.e., implanted) prior to age 5. The children attended the Centre for Hearing and Speech and received weekly therapy in Spanish, daily preschool experiences in English, and audiological services in Spanish. They concluded that the language skills of deaf learners in these programs were commensurate with their monolingual deaf peers when families were given bilingual support. Bunta et al. (2016) found that bilingual Spanish-English support delivered in the home to Spanish speaking families provided advantages in language development for the newly implanted children in their study. Guiberson (2013) noted that as many as 38% of Spanish families in the U.S. were choosing spoken multilingualism for their deaf child. In 2021, Crowe and Guiberson reported on the sentiments, experiences, and evidence-based practices used by early interventionists in Australia. Of their study participants, most revealed that they believe strongly in encouraging families to use a non-dominant language at home with their child.

However, very little research to date has been done to examine the reasons why families are choosing *spoken* language bilingualism for their deaf children, or to investigate subsequent

language and literacy outcomes. Historically, parents were advised to focus on only one language with their child, usually the majority language of the community (e.g., English in Canada) (Bolen, 1981; Meadow-Orlans et al., 2003; Crowe et al., 2014, Simpson & Mayer, 2023). As such, some multilingual parents, counseled to use the majority language in their home, struggled to provide meaningful interactions (e.g., in spoken English) as they lacked proficiency in the language themselves. This minimized access to proficient language modeling during the critical language acquisition period for their deaf children, and at the same time denied them access to the home language and the culture of the family. In the current context of improved access, more professionals are encouraging families to speak their home language alongside the majority language, allowing deaf children from multilingual families to engage in those critical, contingently responsive interactions with their caregivers during the early years in order to develop a first language.

The primary goals of this study are to examine the language and literacy achievements of deaf students from Francophone homes who are living in English majority settings and attending French language schools, to investigate the experiences of the parents regarding the decision to educate bilingually, and to consider demographic and other variables that impact outcomes. The study is guided by the following research questions: 1) How does the language and literacy achievement of school-aged deaf learners in French language minority schools compare to age-based norms in French and English? 2) What are the demographic characteristics of the deaf students (i.e., gender, unilateral/bilateral hearing loss, personal amplification, level of auditory functioning, grade placement, additional disabilities, home language, home literacy practices) that impact outcomes? 3) How do parents of deaf students describe their decision-making process around enrolment in minority language education?

4 Current study

While the focus for this paper is on the third research question, a fuller description of the study has been included to provide the context for and overview of the data collected.

4.1 Participants and setting

Southern Ontario is an Anglophone area where the majority of services and community events are conducted in English. That said, Ontario is officially a bilingual province where, under the Education Act, French and English are recognized as languages of instruction within the four publicly funded school systems in Ontario: French Catholic, French public, English Catholic, and English public. Within the English systems, French immersion programming, where at least 25% of the curriculum is conducted in French, is available (Lepage, J-F. & Corbeil, J-P, 2013). Only the children of Francophone parents are offered enrolment in Francophone schools under Article 23 of the Canadian Charter of Rights and Freedoms (Government of Canada, 1999). The four deaf Francophone student participants in this study have been enrolled in a Francophone school but live in a minority language environment because interactions outside of the school community occur primarily in spoken English.

Two female students (aged 11 and 17) and two male students (aged 16 and 17) participated in the study. Representative of the diversity among deaf learners, three of the four student participants wear hearing aids with hearing losses ranging from mild to moderate, moderate to severe, and moderately-severe to severe respectively. One participant has a profound hearing loss, wears bilateral cochlear implants, and has been identified with additional exceptionalities.

All four students communicate comfortably in both French and English and come from exogamous homes where one parent is Francophone, and the other parent is Anglophone. Three of the four participants had exposure to both languages prior to school entry, and the participant whose father is Francophone began learning French only upon school entry. One participant moved to a French Immersion setting in the sixth grade and an English high school for grade nine after additional learning disabilities were identified because the parents found that the English program had more resources available.

In addition to the students, parents also served as participants in the study in that they agreed to be interviewed and completed written questionnaires and checklists.

4.2 Measures

Quantitative and qualitative data were collected from both student and parent participants. For the students, this included an interview and the administration of four standardized tests to assess language and literacy abilities in both English and French including the Clinical Evaluation of Language Fundamentals – Fifth Edition [CELF-5] (Wiig et al., 2013), Évaluation clinique des notions langagières fondamentales Cinquième édition: Version pour francophones du Canada [CELF-5-CDN-F] (Wiig et al., 2019), Wechsler Individual Achievement Test – Third Edition (WIAT-III) (Wechsler, 2009), and Test de rendement individuel de Wechsler: Version pour francophones du Canada (WIAT-II-cdn-f) (Wechsler, 2008).

Parents completed a questionnaire that included a rating scale on two standardized measures of auditory performance and speech intelligibility and were also interviewed. Given the focus of this paper, detailed descriptions are only provided for the parent measures.

4.2.1 Parent questionnaire

Parents completed a written questionnaire in their preferred language to report the following information about their children: (1) basic demographic information (e.g., gender, hearing loss, personal amplification, grade, additional disabilities, home language), (2) language and literacy experiences in the home, (3) intervention and services received at preschool and school level, (4) educational placement and history (e.g., inclusive or congregated setting), (5) educational accommodations (e.g., Hearing Assistive Technology (HAT) use, notetaker), (6) external support services (e.g., speech therapy, reading intervention), and (7) background information directly related to their decision-making around enrolment of their deaf child in a French minority school. They were also asked whether services and supports were provided in French or English.

4.2.2 Parent interview

Interviews were conducted in the parents' language of choice and questions expanded upon the themes that were generated by the responses to the written questionnaire. During the interview, parents were asked to rate their child's listening and spoken language skills by the using the scales on the Categories of Auditory Performance – II (CAP-II) (Archbold et al., 1995, 1998; Gilmour, 2010) and the Speech Intelligibility Rating (SIR) (Allen et al., 2001).

4.2.3 Data collection

Parents were initially contacted via email or phone calls to introduce the goals of the study. Once parents indicated an interest, longer phone calls and emails followed outlining the time commitment for both the qualitative and quantitative data collection. Families were assured that the data collection would be done at their convenience either in their home or an agreed-upon private location such as reserved and enclosed library workspaces. Consent forms for this study were provided to parents in the language of their choice (i.e., English or French). Similarly, deaf

student participants were also provided with a choice in language for their assent form. The university ethics committee granted approval for this study.

To begin, parents and participants sat down for a recorded interview with the author in person or via Zoom. While parents were interviewed first, the students were also present during the interview, listening in on their parents' responses so that they could observe the process and get comfortable with the interviewer. In the first part of the interviews, parents were encouraged to recall and describe their decision to use two spoken languages with their child after they had been identified as deaf. Parents expanded upon their answers providing important details about their experiences raising their deaf spoken language bilingual child. In the second part of the interviews, parents were prompted to describe the influences on the decision to enroll their child in a French minority school and provide a rating from the Categories of Auditory Performance – II (CAP-II) (Archbold et al., 1995, 1998; Gilmore, 2010), and the Speech Intelligibility Rating scale (SIR) (Allen et al., 2001). Following the parent interviews and within the same visit, the student participants who had listened into their parents' interviews were given the opportunity to respond to the questions from their own perspective. Initial visits and interviews generally lasted more than one hour with families sharing many additional details of their experiences over the years.

After the interviews, parents were asked to complete the written questionnaire, at their convenience. All interview data has been transcribed and preliminary analysis is revealing themes across parent participants.

5 Results and discussion

Parents described initially listening to the conflicting opinions of professionals, and then making the decision to opt for spoken language bilingualism, seeking support from those professionals who would stay the course with them. The decision to communicate in both languages began early with three of the four families and came later, at transition to school, with the fourth family. These same three families described receiving bilingual early intervention services through a qualified teacher of the deaf or bilingual service providers at the hospital. One Francophone mother explained her single-minded focus upon diagnosis:

I had taken the decision to go for oral with [my son] and really focus to make sure I was spending enough energy into French and English. Because it was a challenge, and I knew I could communicate with him (...) so I didn't really want anyone reminding me that it [sign] was an option. You know, like I was just trying to focus. And I'm still like that.

Another francophone mother explained her decision:

I remember when- when [son's name] was diagnosed with his hearing loss, the audiologist told me that he may not be able to learn two languages and that I may have to sacrifice French for just speaking to him in English. And I was crushed. And I was like, "There's no way. Like, what do you mean? Like, he should be able to learn two languages" And, and I was like, "Well, I'm going to do it until they tell me I can't, or until he tells me that he can't, right?"

Three of the four parents described the emotional connection they have with their own first language and the desire to be able to express themselves to their child in that language.

Parents also recognized that if their home language was French, it would be more difficult for their deaf children to acquire and maintain the language given that they lived in a majority

language Anglophone setting. However, they also felt that if their children were given access to the minority language from birth and continued with it in an academic setting, the likelihood that the majority language would also develop with natural exposure in the community was good. This is how one francophone mother explained her decision to send her son to the French school:

It was always French. We even moved to the area where we moved to; we did knowing that there was a French school. And I guess the reason was more like, that's my first language and French is important to me. And I was at home at the right time, right?, with him. And so, his first language was also French or predominantly because he was with me most of the time. So, for me, it just wasn't natural to speak to him in any other language. Right? So, and I know that just in the long run too, like for myself included, it's like, I have a job because I speak French and like, so, I wanted to be able to give him that same option, right?, for two languages. And then that way I wasn't worried about him learning how to speak English. I knew that was going to come. And with [my husband] being English, he was going to pick up that way. So, I was really, because we're in a minority environment...so I was like, I am going to be the only one that's going to speak French to him. So that [enrolling him in minority French school] was important. And then I, like, putting him in a French school, then, he'll have that as well. So that way when he's out everywhere else, he's going to learn English, right?

In addition to language acquisition and maintenance, parents gave further reasons impacting their decision to enroll their children in minority French schools. One parent described the possibility of returning to France and how education in French would be imperative for a successful transition should this possibility occur. Similar to the parent quoted above, another parent described how they had made the decision when it was time to enroll their child in school and explained that it was because they recognized the advantages of bilingualism in Canada's official languages for future employment.

Three of the four parents described the emotional connection they have with French and their desire to be able to express themselves to their child in their first language. These same parents described extended family as a motivating factor for pursuing enrolment in French minority schools despite living in Anglophone communities. These personal reasons reflect a thread in second language learning where additive bilingualism is seen as more than just providing future opportunities for employment in Canada or worldwide but provides rewards with cognitive and social gains as well. As Lam-Bentley (cited in Paradis et al., 2021, p. 211) writes:

Language, in particular, is essential to taking up cultural identity... Language isn't just the medium by which a people communicate with each other; it is the key (or "code", as anthropologists call it) to accessing an entire world of rich nuance, meaning and belonging to one another that only a community member would understand.

Parents also described communication with their extended family as a motivating factor. One mother pursued oral language and specifically French reasoning:

My parents are back in France; it may have been more difficult to learn any sign language. And if I had to learn sign language, here, the most sense would have been the ASL, which for my parents, would have been really difficult and we would have lost our connection.

Another Francophone mother said:

My mom only speaks French and I can't- with him [husband] being only an Anglophone, I couldn't do enough French with her, too. Yeah. And I just found that the school really was a huge influx of French culture and information and vocabulary, that it improved our ability to speak French at home.

While positive about their choice, parents did raise concerns about their decision, acknowledging that there were any number of individual differences that could affect their child's ability to learn two languages. They all expressed the need to be mindful of the rate at which their children were developing language with the possibility of shifting course, if required. This is in line with the observations of Paradis et al. (2021) that, "There is a great deal of individual variation among children with regard to how quickly they learn an L2" (p. 183). As one Francophone mother explained:

It was never a "Well, too bad you're going to learn it." It was more of a, "Well, we're going to try this. And if you don't pick up language as easily as you should and it's hindering your academics or whatever, then of course, I mean, we're going to do what's best."

Another mother stated:

I was worried about, you know, how she would succeed in a school environment. And as a parent, you just want, you know, to make clear the way. So, it's as easy as possible with the least amount of challenges as possible. And I was worried about French being a challenge as opposed to an asset.

Another Francophone mother commented:

I've felt that I would be better equipped to help in a French environment. But I had always said at the time that if he could not get proper support, he would go to English where he would get support.

A Francophone father described ignoring advice not to enroll their daughter in the minority French school despite English being spoken exclusively in the home. He explained that: "At the end of the day, we just decided, you know what, it's something we want to try. And if she's struggling, then, well, we can always switch her to English."

Parents of hearing children also struggle with the decision to pursue a second language academically. However, with the added challenge of hearing loss, the families who participated in this study understood that they may have had more at stake. This same father explained:

We realized, okay, this school can offer us a lot of resources. And in it they proved, you know, almost too overwhelming at times when it came to resources, but we were able to tailor- to tailor it to what [our daughter] needed. And she seemed to be doing well with it.

Another mother concluded: "The French was not going to be the problem. It was going to be the hearing component no matter what the, the material was."

6 Conclusion

Understanding the influences on parent decision-making in a bilingual country such as Canada is important for professionals (e.g., early interventionists, teachers, school board policy makers) as they support families and their deaf children. Implications of parental decision-making immediately upon learning of their child's hearing loss could impact the entire trajectory of a family's future. Findings from interviews with Francophone parents in this study are consistent with the reports from previous research (e.g., Crowe et al, 2014) that the decision to pursue spoken

language bilingualism is informed by a range of factors including engagement with the language and culture of the home and the extended family, developing a sense of belonging and identity, and access to future educational, vocational, and employment opportunities.

With more than 1000 French minority schools across Canada (Statistics Canada, 2023), Francophone families in Canada should have the opportunity to educate their children in the language of their culture and their home. There is no reason that deaf children and their families should be denied this opportunity. As one Francophone mother explained after receiving professional support in her decision making:

I was encouraged by [the homevisiting teacher of the deaf] that, you know, this is - this is something that she can do. And, and if she can't, then you just take her out and that's it. It's like it's – there's no cost to trying. It was literally, other than changing schools, there was no- there was nothing to give up. And it was it was all positives.

The parents in this study are illustrative of the new narrative in bilingual deaf education and the importance of informed choice. The unprecedented shift in early access to spoken language through technology has opened up doors to language learning such that spoken language bilingualism is a real possibility. This shift also allows families to communicate with their deaf children in their L1—whatever that language may be—as well as providing the access to the home culture that speaking the language affords. It also provides families the options of enrolling their deaf children in a minority language school setting or for others, a bilingual educational setting (e.g., French immersion). As more families are encouraged to speak to their deaf children in the language that they are most comfortable with, the benefits of good language models through capable users should translate into second spoken language learning in the community or mainstream setting also affording the cognitive, social, and long-term employment benefits of bilingualism in our worldwide economy. There is no doubt that the possibilities for bilingualism for deaf learners have never been greater.

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