Foreword

When Kristin Snoddon and Joanne C. Weber initially invited me to write a Foreword to *Critical Perspectives on Plurilingualism in Deaf Education*, I was reluctant to take on this responsibility because I am not an 'insider' in Deaf education. My engagement with the Deaf community in Ontario came about in the late 1980s when members of the Deaf Ontario Now movement approached me about the empirical research on bilingual education involving spoken/written languages and its potential relevance for bilingual-bicultural education involving natural sign languages (American Sign Language [ASL] or Langue des signes québécoise [LSQ]). As Snoddon (this volume) lucidly documents, at the time the Deaf community in Ontario was pressuring a reluctant provincial government to rethink the predominant monolingual oralist approach to the education of deaf and hard-of-hearing (DHH) students. Thus, empirical research that strongly supported the legitimacy and effectiveness of bilingual education for minoritized students (e.g. Cummins, 2001) strengthened the case for implementing ASL/English bilingual education in provincial schools for the deaf.

In contributing to this volume, I see my role as engaging in dialogue similar to the dialogue about educational equity and effectiveness initiated by the Deaf community in Ontario more than 30 years ago that I was privileged to be part of. The authors of many of the chapters in this volume point out that the educational landscape for deaf students internationally has changed dramatically during the past 30 years. As Enns and colleagues (this volume) note, 'powerful hearing aids and cochlear implants are providing better access to speaking and listening as a viable option for DHH students'. One result of these changes is declining enrolments in schools for the deaf that have often employed deaf teachers and used natural sign languages for instructional purposes. Even in Sweden, long acclaimed for its enlightened policies regarding sign language instruction and provision of opportunities for parents to learn Swedish sign language (SSL), students' proficiency in SSL has declined as a result of more frequent placement in mainstream classes (Schönström & Holmström, this volume).

There is consensus among the authors of this volume that inclusion in mainstream classrooms is by no means a panacea for deaf students, with or without advanced technology supports. Russell (this volume) highlights

the 'illusion of inclusion' and explicitly asks the central question that underlies the entire volume: 'In what ways can we re-imagine school environments that support deaf children?'

A general theme throughout the volume that responds to this question invokes the instructional possibilities that emerge when we shift from a monolingual (e.g. English-only) orientation to children's languages to an orientation defined by the Council of Europe's (2001) construct of *plurilingualism*. In their Introduction, Snoddon and Weber draw on this construct to highlight the pedagogical benefits of enabling students to utilize their entire set of linguistic resources, including their partial competencies in different languages, varieties and modalities. The construct of plurilingualism also highlights the fact that boundaries between languages are fluid and permeable rather than rigid and fixed. The history of Deaf education illustrates all too well the academic and linguistic deficits that are created when evidence-free educational policies and monolingual instructional practices deny students access to their plurilingual resources. These ideologies, unhinged from empirical evidence, constitute a brutal denial of human rights and unfortunately, as the contributors to this volume document, the residues of these ideologies continue to impact the lives and academic potential of DHH students. In Ontario, for example, government policies force parents to choose between spoken language or sign language services (but not both), with the result that children who receive cochlear implants are effectively prevented from learning ASL or LSQ (Snoddon, this volume).

Linked to plurilingualism is the construct of *translanguaging pedagogy*, broadly understood as the instructional mobilization of students' full linguistic repertoire and the promotion of productive contact across languages. During the past 20 years, educators of emergent bilingual students have demonstrated the potency of these instructional strategies to increase students' access to the curriculum and to enable them to showcase their creative, intellectual, artistic and linguistic abilities (e.g. Cummins & Early, 2011; DeFazio, 1997; Lau & Van Viegen, 2020).

The theoretical and educational significance of the present volume lies in its exploration of how these emerging insights about plurilingual/translanguaging pedagogies might be applied to the education of DHH students. This exploration entails a direct challenge to the persistence of monolingual oralist pedagogical assumptions within mainstream education. The instructional power of translanguaging pedagogy in the education of DHH students is vividly illustrated in Camilla Lindahl's analysis (this volume) of how Swedish sign language and Swedish in written form contribute to joint meaning-making in science education. She illustrates how teachers and 13–15 year-old students draw on their entire linguistic repertoire to explore scientific concepts and, in the process of translanguaging across semiotic modes, deepen and refine their understanding of scientific content. Not only is knowledge of academic content enriched,

but because the languages interact in the process of communication, 'language proficiency in sign language strengthens language proficiency in spoken/written language and … one language helps to enrich the second language with more possible meanings for different terms'.

A first step in re-imagining school environments that support DHH children is to examine the extent to which theoretical understandings that have emerged in the broader empirical research on minoritized bilingual students apply equally to the education of DHH children. In other words, what evidence exists upon which to base policy and instructional decisions? This question can be addressed in relation to four central issues, expressed here as questions:

- What are the causes of underachievement among DHH students?
- To what extent does the development of sign language proficiency in the preschool years contribute to subsequent academic development?
- To what extent is there evidence of a positive relationship between sign language proficiency and the development of literacy in the dominant language?
- To what extent will DHH students benefit from a bilingual and/or plurilingual instructional approach focused on developing students' abilities in both a natural sign language and the dominant spoken/written language?

This dialogue between the mainstream research on minoritized bilingual students and the emerging research on DHH students shows clearly that the same developmental and instructional principles operate in both contexts.

Causes of Underachievement

Based on extensive empirical evidence, I have argued that the historical underachievement of minoritized students is rooted in the operation of societal power relations and their reflection in patterns of teacher-student identity negotiation (Cummins, 1986, 2001, 2017a). A major reason why mainstream initiatives aimed at closing the achievement gap between social groups have produced such meager results is that issues related to societal power relations and identity negotiation in schools have been largely ignored. An implication of this analysis is that the effective instruction of minoritized students *requires* educators to challenge coercive relations of power.

The operation of coercive power relations in the historical and current education of DHH students is amply demonstrated in this volume. O'Brien (this volume), for example, points out that 'when a student or family attempts to campaign for language access or for recognition of their linguistic capital in sign language, they are not just fighting against a single teacher or school, but the whole educational establishment and the weight

of history' (p. 72). Weber (this volume) likewise documents the ways in which cognitive-imperialist discourse positions DHH students as deficient and in need of a 'cure' in order to succeed in school. In short, medical, social and educational structures still systematically deny DHH children early and appropriate access to a strong primary language in their early developmental years. As a result, cognitive stimulation and linguistic interaction within the classroom have been severely limited for many students, both historically and currently.

The Need for a Strong Conceptual Base in the Early Years

Research in contexts around the world has demonstrated that the level of development of children's primary language is a strong predictor of their second language development (National Academies of Sciences, Engineering, and Medicine, 2017). To what extent does this relationship hold when the primary language is a visual language and the second language an auditory/oral language? The research synthesis carried out by the National Academies of Sciences, Engineering, and Medicine answered this question unambiguously:

> Studies of deaf children learning American Sign Language (ASL) and English offer strongly compelling evidence that L1 development facilitates L2 development, illustrating the effect even across different modalities. … Thus, it appears that learning a language early establishes a general foundation that can be engaged for later language learning and literacy. (National Academies of Sciences, Engineering, and Medicine, 2017: 4–16)

In short, there is consensus in the research literature that acquisition of a strong language and conceptual foundation during the child's early development is a prerequisite for subsequent language and literacy development in the dominant language of the school. The natural language of the Deaf community in any country clearly constitutes an appropriate language for early conceptual development for those children who have, or are provided with, access to a signing community. Deaf children, with or without cochlear implants, who are not provided with access to a signing community, are likely to spend considerable time trying to acquire the oral language code and this instructional focus on 'code-breaking' may limit the extent to which they are enabled to use language for communication, conceptual development and engagement with their experience.

Linguistic Interdependence

The principle of cross-lingual interdependence posits that there is a common underlying proficiency that enables transfer of conceptual and linguistic skills and knowledge across languages (Cummins, 1981). The evidence supporting cross-lingual interdependence is clearly summarized

by Dressler and Kamil as part of the Report of the National Literacy Panel on Language-Minority Children and Youth (August & Shanahan, 2006). They conclude:

> In summary, all these studies provide evidence for the cross-language transfer of reading comprehension ability in bilinguals. This relationship holds (a) across typologically different languages …; (b) for children in elementary, middle, and high school; (c) for learners of English as a foreign language and English as a second language; (d) over time; (e) from both first to second language and second to first language. (August & Shanahan, 2006: 222)

Numerous research studies conducted in North America during the past 20+ years have demonstrated that deaf children and adults who develop strong ASL signing skills also perform better on measures of English literacy than those who fail to develop strong ASL skills (e.g. Strong & Prinz, 1997). Research studies conducted in contexts outside North America have also demonstrated positive relationships between the development of expertise in natural sign languages and overall academic performance. Transfer between sign language and written/spoken language has been reported at lexical, morphological, syntactic and pragmatic levels (e.g. Andrew *et al*., 2014; Hermans *et al*., 2010; Kontra, 2020; Malaia & Wilbur, 2020; Menéndez, 2010; Padden & Ramsey, 1998). The positive relationships can be attributed to transfer of conceptual elements (knowledge of the world) across languages, transfer of metacognitive and metalinguistic elements, and some specific linguistic elements (e.g. fingerspelling, initialized signs). In addition, cross-language activation studies demonstrate that proficient signers activate signs while working in a spoken/written language (Morford *et al*., 2014). This provides behavioral evidence of two phonological systems in bilingual signers that interact with each other despite the different modalities of the two systems.

The interdependence principle has relevance for several controversial issues in the education of DHH students. First, although rigorous evaluation findings are sparse, the reality of cross-lingual transfer explains why students in bimodal bilingual programs appear to perform at least as well in written literacy as those in non-bilingual programs (Svartholm, 2010). Concepts, thinking skills and learning strategies developed through sign language instruction support the development of literacy in the dominant school language.

Second, the strong evidence for ASL/English interdependence refutes the claim put forward by Mayer and Wells (1996) that direct transfer between ASL and English cannot take place because the structure and modalities of the languages are so different. They argue that manually coded versions of the spoken language are an essential mediator in enabling DHH students to acquire reading (and writing) skills. Their argument that transfer cannot take place is refuted by the overwhelming evidence that transfer *does* take place.

Third, the refusal by auditory-verbal therapy professionals in some contexts to provide services to children who start learning a natural sign language is inconsistent with the extensive evidence showing positive relationships between sign language expertise and development of spoken and written language proficiency (Edelist, 2015; Snoddon & Paul, 2020).

Plurilingual Instruction

Partly because of the paucity of genuine bilingual programs for DHH children, there is a lack of coherent research evidence regarding the outcomes of such programs (see Howerton-Fox & Falk, 2019). Even in Sweden, where a sustained effort was made to implement bilingual education involving SSL and spoken/written Swedish as mediums of instruction, interpretation of results is complex (Schönström & Holmström, this volume). Early findings indicated the development of stronger literacy skills in Swedish compared to previous outcomes in monolingual/oralist programs, but the gap between DHH and 'mainstream' students in graduation rates remained significant (Svartholm, 2010). National data reported in 2008 showed that DHH students in special schools had significantly lower passing rates in Swedish, mathematics and English than was the case for hearing students whose first language was Swedish (Swedish: 69% versus 97%; mathematics: 55% versus 93%; English: 59% versus 94%). Svartholm points out that these data must be interpreted cautiously because many of the students in the special schools had additional learning difficulties that compounded the learning challenges resulting from their lack of access to a solid linguistic base in their early years. In addition, the special schools had a large number of children (25%) from immigrant backgrounds and almost one-third (32%) had enrolled as late as Grades 7–10.

An additional consideration relates to the problematic pedagogical assumptions underlying the model of bilingual education implemented in Swedish schools. Bagga-Gupta (2004) critiqued the assumptions that (a) instruction in Swedish reading and writing should be delayed until the age of 6–7 years to allow SSL to become well established, (b) the two languages should be kept separate for instructional purposes and (c) the teaching of Swedish should be carried out through an explicit comparative grammar instructional method. None of these pedagogical assumptions is consistent with current understandings of effective pedagogy in general or within bilingual education for minoritized students (Cummins, 2017b). For example, there is overwhelming evidence that (a) literacy engagement is a primary determinant of literacy attainment, (b) teaching for cross-linguistic transfer is a crucial component of effective instruction in bilingual programs and (c) connecting instruction to students' lives, experiences and imaginations is a prerequisite for academic engagement. The implications of this evidence are that we should: expose children to books and draw their attention to print from a very early age; encourage students to

draw on their entire plurilingual repertoire rather than insisting on language separation; and develop language awareness (focus on form) not in isolation but rather in the context of experiential learning that engages students in intellectually challenging projects and tasks.

Re-imagining School Environments for DHH Children

These considerations bring us back to the question posed by Debra Russell (this volume): *In what ways can we re-imagine school environments that support deaf children?*

It is clear that a large majority of DHH students, with or without cochlear implants and/or other auditory technological supports, are being educated in purportedly 'inclusive' settings in mainstream schools. In many cases, comprehension of classroom instruction is mediated by an educational assistant or interpreter who attempts to help students understand instruction by using some form of sign language. However, as illustrated in Russell's chapter (this volume), interpreters are frequently not fluent in a natural sign language or use a manually coded system of the dominant spoken language. Consequently, the input that students receive is often both conceptually and linguistically fragmented. Furthermore, as Enns and colleagues (this volume) point out, 'even with access to spoken language through their implants or hearing aids, these students can and do feel isolated and segregated in a mainstream environment'. They highlight the fact that when parents are given a choice, many will opt for instructional environments that create opportunities for their children to develop proficiency in both spoken and sign language.

Several of the chapters in this volume point to an emerging consensus among many researchers and Deaf education experts regarding the benefits of providing opportunities for DHH children to develop proficiency in both spoken and sign languages through bimodal bilingual education. A bimodal bilingual instructional approach is inspired by the concepts of plurilingualism and translanguaging which highlight the interpersonal and cognitive affordances generated by access to multiple languages and varieties that can be used in flexible and creative ways according to the context. This approach views sign language and assistive hearing devices as mutually reinforcing – complementing each other rather than competing with or being in opposition to one another.

Enns and colleagues (this volume) similarly point to the recently emerging views of various researchers who advocate for more equitable use of both ASL and spoken English for DHH students with cochlear implants at schools for the deaf and in mainstream schools. These researchers have highlighted the benefits of positive identity development in both languages as well as improved access to language and communication, better learning potential and the ability to move between the Deaf and the hearing worlds.

Enns and colleagues also review recent research into co-enrolment programs in which DHH and hearing students are educated in the same classrooms, co-taught by a specialist in DHH education and a regular teacher, with the goal of enabling students to develop skills in both spoken and sign language. Multiple benefits appear to be associated with this approach. DHH students appeared to benefit academically; they experienced increased social interaction and were fully part of the classroom community. This pattern of findings, albeit preliminary, parallels the positive outcomes of two-way dual-language programs in which, for example, Spanish-dominant and English-dominant students are educated together, with Spanish and English as languages of instruction (e.g. Valentino & Reardon, 2015).

An additional advantage of the pedagogical philosophy underlying co-enrolment programs is that they focus on students' personal, cognitive, linguistic and creative assets rather than on presumed deficits, thereby challenging the oppressive hierarchy of languages that is characteristic of more conventional mainstream programs. All students are adding an additional language to their repertoire of skills and both hearing and DHH students are contributing to the linguistic enrichment of the entire classroom community.

Conclusion

Unfortunately, however, provision of a similar instructional environment through bimodal bilingual education, with or without co-enrolment of DHH and hearing children, is increasingly challenging to implement in many countries because of the declining numbers of teachers and/or instructional assistants fluent in natural sign languages. This decrease is directly linked to the reduced numbers of students enrolled in schools for the deaf, which historically have provided socialization opportunities for the acquisition of sign languages. Thus, ironically, the provision of effective supports for DHH students in mainstream schools is being undermined by the erosion of opportunities for children to acquire a strong linguistic and conceptual foundation in a natural sign language.

The unfolding of this situation is not innocent – it didn't just happen by accident. It is a direct result of the continuing operation of coercive power relations to which the Deaf community and DHH children have been subjected since evidence-free monolingual oralist ideologies were ushered in by the 1880 International Congress for the Improvement of the Conditions of Deaf-Mutes in Milan. These societal power relations are manifested both in discriminatory structures and in the vehement opposition by medical professionals, policymakers and some educators in many countries to the provision of opportunities for DHH children and their parents to acquire sign language. Discriminatory structures are exemplified most egregiously in exclusionary teacher education programs such as the teacher-of-the-deaf program in York University in Toronto, which

includes no full-time deaf faculty member, offers no ASL courses for future teachers of DHH students and has significantly restricted access by deaf university graduates to the program (Snoddon, this volume).

Obviously, we still have a long way to go before evidence-based educational policies for DHH students are implemented and the misinformation disseminated to parents by policymakers and medical professionals is acknowledged and repudiated. But the evidence and insights assembled by the contributors to this inspirational book represent a very significant beginning that hopefully will gather momentum as more schools explore the educational potential of plurilingual pedagogies and bimodal bilingual instructional approaches.

Jim Cummins

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