

Indigenous young children's language development: Promising Practices and Needs

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With the proportion of Indigenous Canadians under 5 years of age approximately 70% greater compared to the proportion of non-Indigenous young children, and a birth rate 1.5 times that of the birth rate of non-Indigenous peoples (Statistics Canada, 2006), giving Indigenous children the best start in life is one of the most important investments we can make in Canada. A particularly effective investment in this area would consist of supports for parents and other caregivers to engage in responsive language-mediated interactions with infants and young children at home, and community programs to stimulate language development.

Language develops most rapidly from infancy throughout the preschool years. Likewise, language delays and difficulties are best prevented and treated during these early years. Decades of research in neuroscience, developmental psychology, and economics has produced voluminous evidence showing that early interventions supporting the development of less advantaged children have much higher returns than later interventions after children have started formal schooling (Heckman, 2006). This article summarizes what is known about language development of Indigenous Canadians under six years old and efforts that are being taken, as well as those that could be taken, to support optimal language development among this growing young demographic.

Need for a focused program of research

It is worth stressing at the outset that there is an urgent need for research on Indigenous children's speech-language development, needs and responses to interventions. At the time of this writing, there were no population-based data for characterizing the speech-language strengths or difficulties of First Nations, Inuit or Métis children. Indigenous children were not systematically sampled in the two national longitudinal cohort studies of the growth and development of Canadian children and youth (*National Longitudinal Study of Children and Youth* and *Understanding the Early Years*). Further, most Indigenous young children are never evaluated by developmental specialists (e.g., infant development consultants, child care practitioners, speech-language pathologists, pediatricians); speech-language services are extremely limited for children living on-reserve, since they are not eligible for provincially funded services and this is a service that most First Nations do not contract; and well over half of Indigenous children do not have access to child care programs where their speech-language development could be monitored and difficulties noticed. Finally, and perhaps most importantly, most existing monitoring, screening or diagnostic tools have not been validated for use with

A version of this article was printed in *Canadian Issues*, Winter, 2009, pp. 37-43.

The author acknowledges the help of First Nations communities and Indigenous individuals in Canada, the USA, Australia, Aotearoa/New Zealand, Bangladesh and Thailand for participating in various forums and studies focused on Indigenous children's health, early learning, and social inclusion. For correspondence, please contact Jessica Ball, School of Child and Youth Care, University of Victoria. jball@uvic.ca

Indigenous children: screening and assessment tools in current use in Canada are generally rooted in research involving children of European heritage in urban settings with English or French as their first language.¹

Based on existing research on the living conditions, family life challenges, and health of Indigenous youngsters and their academic outcomes, it is generally recognized that Indigenous children face more challenges to fulfilling their developmental potential than any other population in Canada (Ball, 2008; Council of Ministers of Education, 2004). Overall, 52.1% of Indigenous children are living below the poverty line, and have the highest rate of poverty compared to other equity groups: visible minority children and children with disabilities.

Low language proficiency may be an important contributor to these high rates of exclusion: strong language proficiency can increase the probability of success in school, participation in the work-force, economic security, and social inclusion (Bird & Akerman, 2005). It is generally believed, though not well documented, that Indigenous children are at elevated risk of language delays (Canada Council on Learning, 2007; Standing Committee on Human Resources Development and the Status of Persons with Disabilities, 2003). At national and provincial conferences and training workshops involving practitioners in Indigenous Infant Development and Early Childhood Care and Development, urgent calls are repeatedly heard for increased supports for home and community-based language stimulation programs and for diagnostic and speech-language therapy services. Speech-language delays and deficits have been identified as the most frequently occurring type of developmental challenge for Indigenous young children seen in Indigenous Head Start programs (e.g., Minister of Public Works and Government Services Canada, 2002), by the B.C. Indigenous Child Care Society (2004), and by programs surveyed by a Task Force of the Centre of Excellence for Children and Adolescents with Special Needs (deLeeuw, Fiske, & Greenwood, 2002).

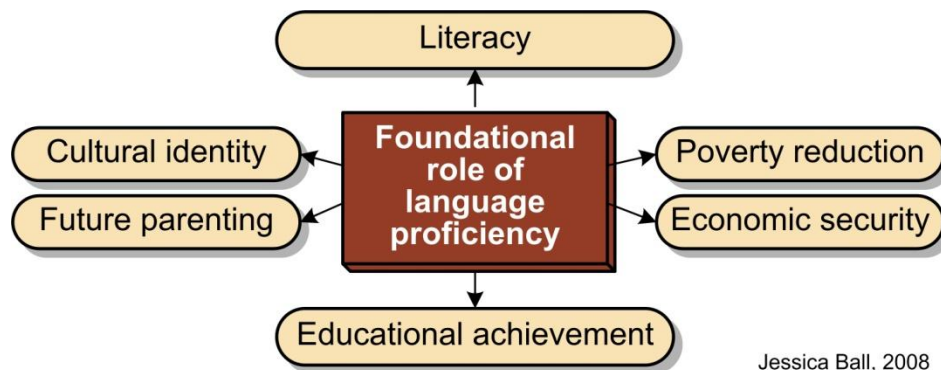
The pivotal role of language in development

Speech-language skills play a role in nearly all developmental outcomes, as shown in Figure 1. Early language learning contributes in primary ways to learning in all other domains, and makes learning at later ages more efficient and therefore easier, self-motivating, and more likely to continue (Shonkoff & Phillips, 2000). In particular, it is well known that success in school requires vast exposure to, practice with, and proficiency in oral language (Hart & Risley, 1995). More generally, weak language skills in the preschool years are a strong predictor of lower academic achievement, particularly for children in lower socio-economic families (Schuelle, 2001). Early interventions to increase language proficiency can significantly increase later success in school (Campbell & Ramey, 1994).

¹ This means that until new assessment tools have been developed, or the validity of existing tools have been established and norms have been gathered, any epidemiological data obtained through ‘universal’ screening and assessment of Indigenous children would need to be interpreted and acted upon with extreme caution.

Figure 1

The foundational role of speech-language proficiency.



Heritage language acquisition

For many children, being able to communicate across generations in their families and communities, and laying down the foundation for a coherent and positive cultural identity with links to the land, means being able to speak their heritage language (Battiste, 2000; Norris, 2007). Speaking the ancestral language is also seen by some as important to a child’s spiritual life (Canadian Heritage, 2005; Kirkness, 2002). Yet, Indigenous children are increasingly less likely to learn their Indigenous language as a first language, if at all (Statistics Canada, 2006): approximately 16% of Indigenous children under the age of 14 years speak an Indigenous language as a first or additional language (Norris, 2007).

A basic value in Canada is that, regardless of where children live in this country, and regardless of their ethnicity, programs for promoting their optimal development should be accessible, available, and linguistically and culturally appropriate to them (Canadian Centre for Justice, 2001). At the same time, colonial policies and values have excluded Indigenous histories, cultures, and languages from public school curricula (Battiste, 2000; Philipson, 1992). Programs that help Indigenous children to learn their heritage language, rather than treating European-heritage language skills as normative, can support their cultural identity formation, cultural knowledge, and connectedness with their cultural community (Crystal, 1997; Hebert, 2000; Ignace, 1998).

Indigenous English dialects

The existence of Indigenous English dialects in Canada is a factor that needs to be considered in the context of policy approaches to improving learning outcomes of Indigenous children. Canadian Indigenous English dialects have been studied by the linguistic community to a limited extent (see review by Ball, Bernhardt & Deby, 2006). Linguistic features of these varieties of English may include vestiges of Indigenous languages carried over to English (or possibly French), resulting in variations on the ‘standard’ variety of the dominant language that are unique to particular heritage language groups. Further, language socialization in Indigenous families embodies their cultures and includes varying pragmatics of communication that may also involve vestiges of their Indigenous language and traditional culture (Bernhardt, Ball, & Deby, 2007). This phenomenon is not restricted to Canada: in Australia, Indigenous English has

been described as the main language of 80% of Indigenous Australians (Speech Pathology Australia, Fact Sheet 2.4).

There is little understanding of the extent to which some Indigenous children's use of a non-standard variety of English or French may be misinterpreted as language delay or language deficit and thus contribute to alarming high estimates of the prevalence of speech-language pathology among Indigenous children (i.e., false positive interpretations of language pathology). Several scholars have noted that Indigenous children whose home language is either a non-standard variant of English or French, or an Indigenous language, need some kind of bridging or transition support to prepare them to succeed in school (Philpott, 2004; Walton, 1993; Wright, Taylor, and Macarthur (2000). Pioneering work has been done in Australia on 'English as a Second Dialect' (Malcolm, Haig, Konigsberg, Rochecouste, Collard, Hill, & Cahill, 1999). Several provinces in Canada now have policies and funding to support school-based ESD programs; however no reports have come to light on the extent or nature of ESD initiatives involving Indigenous children. Given the findings noted above, this is an area that warrants greater research attention.

Auditory problems

Ear infections (*otitis media*) are a good example of the complex determinants of language development among Indigenous children. Ear infections are much more prevalent among Indigenous children (from 2.1% to 78% across communities) compared to non-Indigenous children (about 1%), especially in the north (WHO/CIBA). In the High Arctic, an average of 67% of Inuit children has suffered some hearing loss by the time they reach school-age (Bowd, 2005). In Indigenous children, prevalent causes of ear infections are thought to include hereditary and constitutional factors, infant feeding practices, sleeping position, and mold in poorly ventilated homes. Incidence of hearing loss may be reduced by addressing care-giving practices (e.g., promoting breastfeeding and nutritious solid foods, positioning babies on their back to sleep), ventilation in homes, and other environmental risk factors (e.g., exposure to smoke and organochlorines), and increasing community-based capacity to detect and refer affected children for treatment (Bowd, 2005). These steps in turn could prevent speech-language delays and deficits, and also limit secondary effects such as learning challenges, social and behavioral difficulties.

Supporting early language development

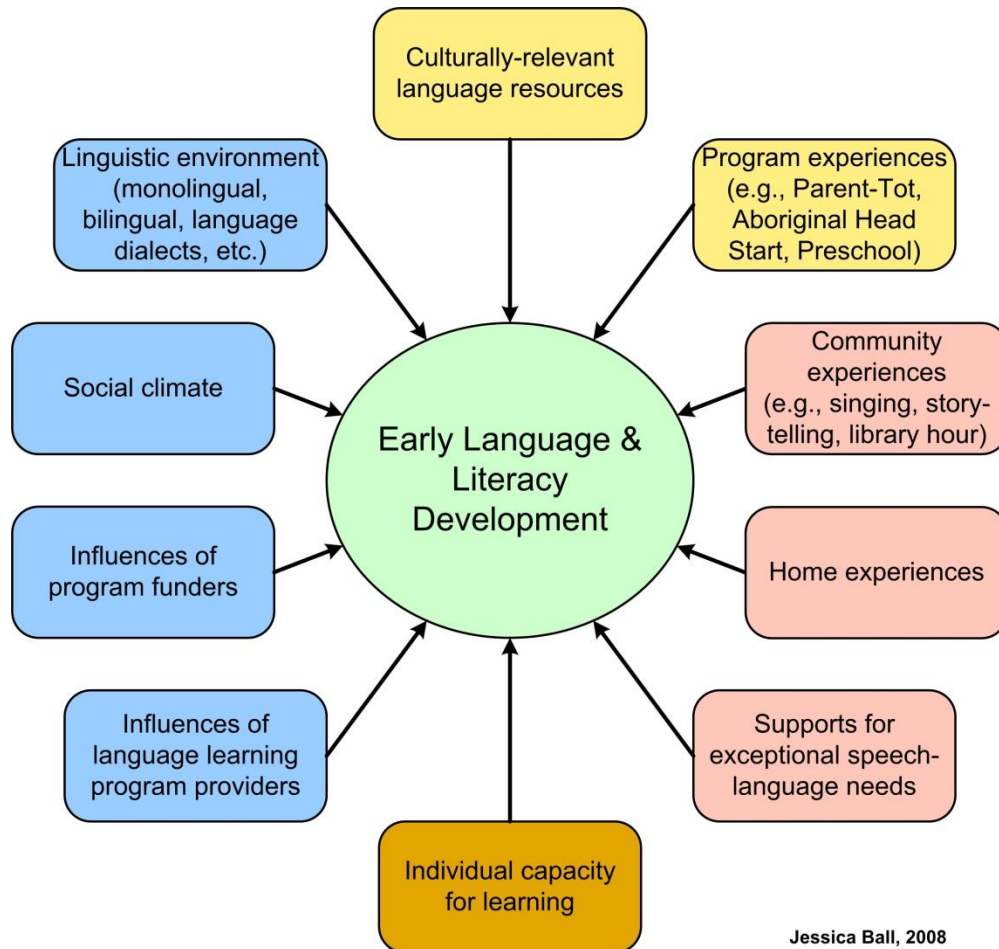
Over the past decade, there have been substantial, primarily federal, initiatives to create quality Indigenous early learning and child care programs. There are a number of community-based and community-involving programs aimed at supporting the language and literacy development of Indigenous children. These include: Indigenous Head Start in Urban and Northern Communities and First Nations Head Start; Indigenous Home Instruction for Parents of Preschool Youngsters, Hanen's You Make the Difference – Indigenous Version, the Parent-Child Mother Goose Program, and Moe the Mouse created by the B.C. Indigenous Child Care Society. In addition, individual communities have developed approaches for use in home visiting, nurseries and preschools, drawing on curriculum common to most early childhood programs, such as music and movement, story-telling, pre-literacy and pre-numeracy games, as well as parenting skills programs. Many of these programs are culturally-rich and aim in part to reinforce positive cultural identity of Indigenous youngsters and their families.

Despite efforts to evaluate some of these initiatives, no body of evidence is yet available identifying their impacts. Nevertheless, these community-based programs for Indigenous young children and their families constitute an existing infrastructure in some communities within which capacity could be developed for early language facilitation and intervention.

Given the importance of early language development for social inclusion, cultural identity, cognitive development, school readiness and educational achievement, new investments of federal funds are needed for a national strategy to support Indigenous early language and literacy. Figure 2 presents factors which can be optimized in a national strategy to support optimal language development among Indigenous young children.

Figure 2

Key influences on early language development



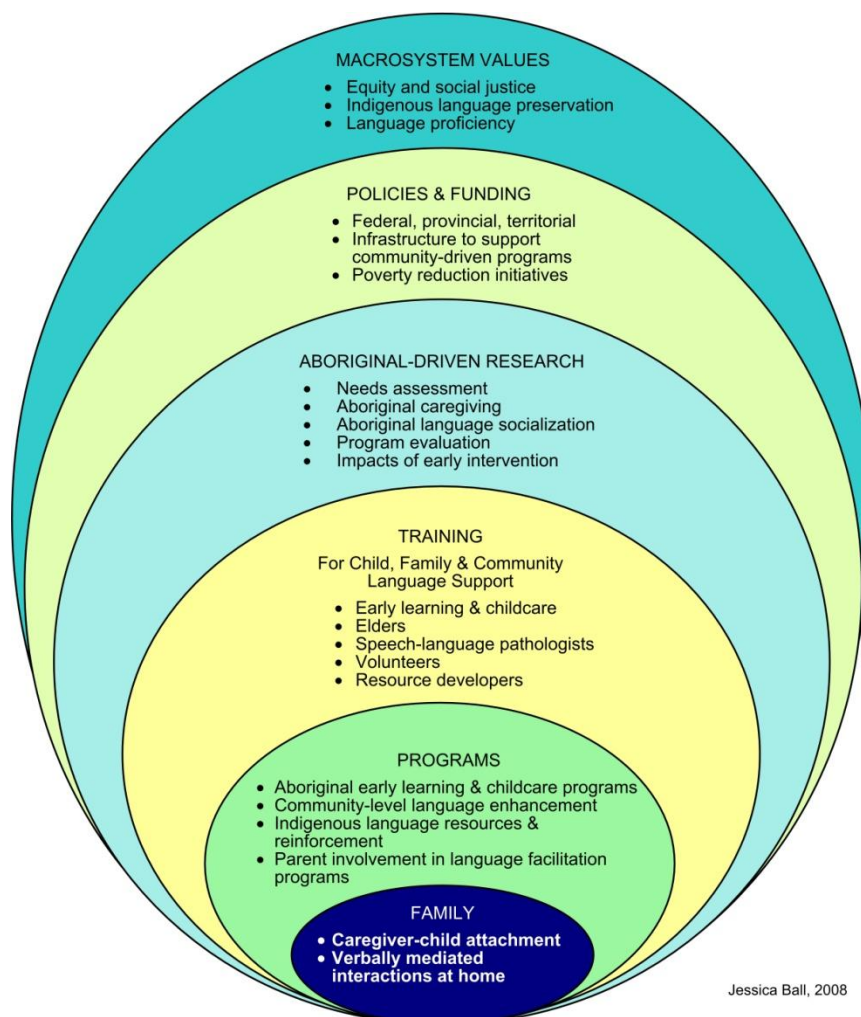
Family and community driven approaches

Recognizing the limited transportability of social knowledge and practice, many Indigenous communities and organizations, along with researchers, educators and practitioners, are encouraging community-driven, dialogical and open-ended approaches to supporting children's development (Ball & Pence, 2006; Bernhard, 1995; Cole, 1989). Community members are uniquely positioned to identify core features of language socialization, to understand the contexts of child development and care in the community, and to offer insights to specialists, educators and investigators about the conditions, needs and goals of a family or community. The ethics and the prospective utility of collaborative, strengths-based approaches have been demonstrated by cross-cultural investigators (Ball 2002; Crago, 1992; Johnston & Wong 2002; van Kleeck 1994). A national strategy that includes a stream for supporting Indigenous early language development should support implementation and evaluation of culturally grounded approaches developed in consultation with families and communities as demonstration projects.

An ecologically comprehensive strategy

Figure 3 portrays the inter-dependent ecological systems in which Indigenous young children and their families are nested. These are contexts where supportive interventions can be introduced to promote optimal language development. This schema situates the family as the core – or heart – of language-mediated relationships between caregivers and young children. The Royal Commission on Indigenous Peoples (1996) also prioritized **family development** and **community-based programs** for children and families as the two most promising entry-points for promoting healthy communication, support, and early detection of needs for extra supports.

Figure 3
Systems of support for Indigenous young children’s language development.



Investments in the areas identified in Figure 3 would yield new knowledge and a potentially effective system of supports driven by Indigenous community agendas and organizations. Partnerships across Indigenous organizations, Canadian Centres of Excellence, post-secondary institutions, and sectors including health, education, and child care could support the development of new resources, capacity, and program strategies. Support for Indigenous early language and literacy facilitation can be expected to:

- reduce high rates of referral for speech-language therapy with their attendant expenses, long wait times, and dependencies on external supports;
- reduce high rates of diversion of Indigenous children at school-entry to special programs for learning support, with their attendant sequelae of social stigma and exclusions;
- counteract prevalent misconstructions of cultural and language differences as communication and parenting deficits;
- promote cultural continuity and self-esteem;
- help to retain endangered heritage languages;
- increase social inclusion of Indigenous children within the fabric of Canadian society.

References

- Ball, J. (2008). Promoting equity and dignity for Indigenous children in Canada. Institute for Research on Public Policy (IRPP) *Choices*, 14 (7), 1-30.
- Ball, J. (2002). The challenge of creating an optimal learning environment in child care: 0Cross-cultural perspectives. In L. Girolometto & E. Weitzman (Eds.), *Enhancing caregiver language facilitation in child care settings* (pp. 1-12). Proceedings from a Symposium of the Canadian Language and Literacy Research Network, Toronto, October 18, 2002.
- Ball, J., Bernhardt, B.M., & Deby, J. (2006). *First Nations English dialects: proceedings of an Exploratory Study in Canada*. University of Victoria. Available at: <http://www.ecdip.org>
- Ball, J., & Pence, A. (2006). *Supporting Indigenous children's development: Community University Partnerships*. Vancouver: UBC Press.
- Battiste, M. (2000). Maintaining Indigenous identity, language, and culture in modern society. In M. Battiste (Ed.), *Reclaiming Indigenous voice and vision* (pp. 192-208). Vancouver: UBC Press.
- B.C. Indigenous Child Care Society (2004), *A Guide for Culturally-Focused Early Intervention Therapy Programs for Indigenous Children and Families in British Columbia: Healthy Children and Partnerships*. Prepared by Deanne Zeidler and Alison Gerlach. Vancouver: Author.
- Bernhardt, B., Ball, J., & Deby, J. (2007). Cross-cultural issues in assessment of phonology. In S. McLeod (Ed.), *The international guide to speech acquisition*. Delmar Thomson Learning.
- Bird, V., & Akerman, R. (2005). *Every which way we can: a literacy and social inclusion position paper*. London, UK: National Literacy Trust. February, 2005. Available at: <http://www.literacytrust.org.uk/socialinclusion/policychallenge.html>
- Bowd, A. D. (2005). Otitis media: health and social consequences for Indigenous youth in Canada's youth. *International Journal of Circumpolar Health* 64(1), 5-15.
- Campbell, F.A., & Ramey, C.T. (1991). Effects of early intervention on intellectual and academic achievement: a follow-up study of children from low-income families. *Child Development*, 65, 684-698.
- Canada Council on Learning (2007). *State of learning in Canada: no time for complacency*. Report on Learning in Canada 2007, Ottawa: Author.
- Canadian Centre for Justice (2001). *Indigenous peoples in Canada*. Statistics Profile Series. Ottawa: Minister of Industry.
- Canadian Heritage (2005). *Towards a new beginning: a foundation report for a strategy to revitalize First Nation, Inuit, and Métis languages and cultures*. Report to the Minister of Canadian Heritage by The Task Force on Indigenous Languages and Cultures, Jun, 2005. Ottawa. Cat. No. CH4-96/2005.
- Cole, E. (1989). E pluribus unum pluribus: multicultural imperatives for the 1990s and beyond. *Journal of the American Speech-Language and Audiology Association*, 31, 65-70.
- Council of Ministers of Education (2004). Quality education for all young people: challenges. Retrieved March 10, 2007 from: http://www.cmec.ca/international/ice/47_ICE_report.en.pdf
- Crago, M. (1992). Ethnography and language socialization: a cross-cultural perspective. *Topics in Language Disorders*, 12 (3), 28-39.
- Crystal, D. (1997). *English as a global language*. Cambridge, England: Cambridge University Press.
- deLeeuw, S., Fiske, J., & Greenwood, M. (2002). *Rural, remote and north of 51: service provision and substance abuse related special needs in British Columbia's hinterlands*. Prince George, BC: University of Northern British Columbia Task Force on Substance Abuse.
- Hart, B., & Risley, T.R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore: Paul H. Brookes.
- Hebert, Y. (2000). The state of Indigenous literacy and language education. In M.B. Castellano, L. Davis, & L. Lahache (Eds.). *Indigenous education: Fulfilling the promise* (pp. 55-75). Vancouver: UBC Press.

- Heckman, J.J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312 (5782), 1900-1902.
- Ignace, M.B. (1998). *Handbook for Indigenous language program planning in British Columbia*. Vancouver, BC: First Nations Education Steering Committee: Indigenous language sub-committee.
- Johnston, J., & Wong, M.-Y. A. (2002). Cultural differences in beliefs and practices concerning talk to children. *Journal of Speech, Language, and Hearing Research*, 45, 916-926.
- Kirkness, V.J. (2002). The preservation and use of our languages: respecting the natural order of the creator. In B. Burnaby & J.A. Reyhner (Eds.), *Indigenous languages across the community*. Proceedings of the 7th Annual Conference on Stabilizing Indigenous Languages (pp. 17-23). Toronto, ON. May 11-14, 2000.
- Malcolm, I., Haig, Y., Konigsberg, P., Rochecouste, J., Collard, G., Hill, A., & Cahill, R. (1999). *Towards more user-friendly education for speakers of Indigenous English*. Perth: Centre for Applied Language and Literacy Research.
- Minister of Public Works and Government Services (2002). Indigenous Head Start in urban and northern communities: program and participants 2001. Retrieved April 20, 2007, from: <http://www.hc-sc.gc.ca/hppb/childhoodyouth/acy/ahs.htm>
- Norris, M.J. (2007). Indigenous languages in Canada: Trends and perspectives on maintenance and revitalization. In J. White, D. Beavon, & S. Wingert (Eds.), *Indigenous policy research: Moving forward, making a difference* (pp. 197-228). Vol.3. Toronto: Thompson Educational Publishing.
- Philipson, R. (1992). *Linguistic imperialism*. Oxford, UK: Oxford University Press.
- Philpott, D. (2004). An educational profile of the learning needs of Innu youth. Memorial University, NFLD. Retrieved January 18, 2007 from: <http://www.turtleisland.org/discussion/viewtopic.php>
- Royal Commission on Indigenous Peoples (1996). *Gathering strength: report on the Royal Commission on Indigenous Peoples*, 13. Ottawa: Canada Communication Group Publishing.
- Schuele, C.M. (2001). Socioeconomic influences on children's language acquisition. *Journal of Speech-Language Pathology and Audiology*, 25 (2), 77-88.
- Shonkoff, J.P., & Phillips, D. (2000). *From neurons to neighborhoods: the science of early childhood development*. Washington: National Academies Press.
- Speech Pathology Australia. *Speech Pathologists working in Early Intervention Programs with Indigenous Australians*. Fact Sheet 2.4.
- Statistics Canada (2001). Indigenous Peoples of Canada: A Demographic Profile, 2001 Census. Ottawa: Government of Canada.
- Standing Committee on Human Resources Development and the Status of Persons with Disabilities (2003). 2002-2003 Proceedings of the Standing Committee on Human Resources Development and the Status of Persons with Disabilities: Taking the necessary measures to enhance the integrity of the Social Insurance Number, A review of the action plan.
- Walton, C. (1993). Indigenous education in Northern Australia: A case study of literacy policies and practices. In P. Freebody & A. R. Welch (Eds.), *Knowledge, culture and power: international perspectives on literacy as policy and practice*. Pittsburgh, PA: University of Pittsburgh Press.
- van Kleek, A. (1994). Potential cultural bias in training parents as conversational partners with their children who have delays in language development. *American Journal of Speech-Language Pathology*, 3 (1), 67-78.
- WHO/CIBA (1996). Prevention of hearing impairment from chronic otitis media. *Report of a WHO/CIBA Foundation Workshop held at the CIBA Foundation, London, UK, 19-21 November 1996*.
- Wright, S. C., Taylor, D. M., & Macarthur, J. (2000). Subtractive bilingualism and the survival of the Inuit language: heritage-versus second-language education. *Journal of Educational Psychology*, 92(1), 63-84.