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REVUE CANADIENNE D'ORTHOPHONIE ET D'AUDIOLOGIE | RCOA

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Speech-Language & Audiology Canada

Orthophonie et Audiologie Canada

Communicating care
La communication à coeur

SERVICE DELIVERY TO FIRST NATIONS, INUIT AND MÉTIS IN CANADA: PART 2

LA PRESTATION DE SERVICES AUX PREMIÈRES NATIONS, AUX INUIT ET AUX MÉTIS DU CANADA : 2e PARTIE

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A RESOURCE KIT: To Assist Speech-Language Pathologists and Audiologists in Providing Informed Services to First Nations, Inuit, and Métis People
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The association was founded in 1964 and incorporated under federal charter in 1975. SAC's periodical publications program began in 1973.

The purpose of the Canadian Journal of Speech-Language Pathology and Audiology (CJSLPA) is to disseminate contemporary knowledge pertaining to human communication and communication disorders that influence speech, language and hearing processes. The scope of the Journal is broadly defined so as to provide the most inclusive venue for work in human communication and its disorders. CJSLPA publishes both applied and basic research, reports of clinical and laboratory inquiry, as well as educational articles related to normal and disordered speech, language, and hearing in all age groups. Classes of manuscripts suitable for publication consideration in CJSLPA include tutorials; traditional research or review articles; clinical, field and brief reports; research notes; and letters to the editor (see Information to Contributors). CJSLPA seeks to publish articles that reflect the broad range of interests in speech-language pathology and audiology, speech sciences, hearing science and that of related professions. The Journal also publishes book reviews, as well as independent reviews of commercially available clinical materials and resources.

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Speech-Language and Audiology Canada supports and empowers our members to maximize the communication and hearing potential of the people of Canada.

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Nous sommes Orthophonie et Audiologie Canada (OAC), une organisation axée sur la membriété qui appuie, promeut et élève les professions de nos membres. Nous sommes le seul regroupement national qui s'emploie passionnément à appuyer et à représenter les orthophonistes, les audiologistes et les aides en santé de la communication du Canada, inclusivement.

L'association a été fondée en 1964 et incorporée en vertu de la charte fédérale en 1975. L'association a mis sur pied son programme de publications en 1973.

L'objet de la Revue canadienne d'orthophonie et d'audiologie (RCOA) est de diffuser des connaissances relatives à la communication humaine et aux troubles de la communication qui influencent la parole, le langage et l'audition. La portée de la Revue est plutôt générale de manière à offrir un véhicule des plus compréhensifs pour la recherche effectuée sur la communication humaine et les troubles qui s'y rapportent. La RCOA publie à la fois les ouvrages de recherche appliquée et fondamentale, les comptes rendus de recherche clinique et en laboratoire, ainsi que des articles éducatifs portant sur la parole, le langage et l'audition normaux ou désordonnés pour tous les groupes d'âge. Les catégories de manuscrits susceptibles d'être publiés dans la RCOA comprennent les tutoriels, les articles de recherche conventionnelle ou de synthèse, les comptes rendus cliniques, pratiques et sommaires, les notes de recherche, et les courriers des lecteurs (voir Renseignements à l'intention des collaborateurs). La RCOA cherche à publier des articles qui reflètent une vaste gamme d'intérêts en orthophonie et en audiologie, en sciences de la parole, en science de l'audition et en diverses professions connexes. La Revue publie également des critiques de livres ainsi que des critiques indépendantes de matériel et de ressources cliniques offerts commercialement.

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SUMMER ISSUE

This special issue is the second of a two part series that has been compiled to bring to the fore service delivery issues for First Nations, Inuit, and Métis in Canada. The first part in this series was published in the summer of 2011 (Volume 35, CJSLPA), not long after the 2010 Canada endorsement of the UN *Declaration on the Rights of Indigenous Peoples*. This document emphasizes the right of Indigenous peoples to live in dignity, to maintain and strengthen their own institutions, cultures, identities and traditions, and to pursue their rights to education, health, employment, and language.

Since the publication of Part 1 of the special issue, many important events within Canada have drawn national attention to the situation of Canada's Aboriginal peoples. The Idle No More movement united the voices of many Canadian and international Aboriginal communities in their demands for environmental protection and Indigenous sovereignty. The hunger strike of Attawapiskat Chief Theresa Spence arose out of the Idle No More movement and was initiated to demand a meeting with Prime Minister Harper and the Governor General of Canada to discuss Aboriginal rights, the environment, and the housing and infrastructure crises in Attiwapiskat. The hunger strike did lead to a meeting, but not the hoped-for changes articulated by Chief Spence. The mandate of the *Truth and Reconciliation Commission* ended. The Commission formally investigated the devastating impact of Canada's residential school system on Aboriginal families. Under the direction of Justice Murray Sinclair, the Commission visited more than 300 communities documenting the abuse, cultural indoctrination, and long-term effects of the residential school system. Most recently, the Conservative government proposed a First Nations education reform bill known as the First Nations Control of First Nations Education Act, which focused on improving on-reserve education. While there is universal acknowledgement that reform is necessary, the bill was rejected by many Aboriginal leaders as being reactionary, unilateral, and paternalistic. Conflict over the bill led to Shawn Atleo's resignation as National Chief of the Assembly of First Nations (AFN) and has brought the future of the AFN itself into question.

All of these events have heightened awareness and knowledge in the general public about Canadian Aboriginal issues, but a great deal more will be needed in order to achieve the ultimate goals of initiatives and movements such as those described above. The purpose of this second CJSLPA special edition on Aboriginal issues is to continue to promote awareness and understanding of the knowledge, competencies, and abilities that Aboriginal children bring to their own learning and to educate speech-language pathologists and audiologists in order to more effectively, competently, and successfully serve Aboriginal children. The contributors to this special edition provide insights obtained from research, clinical intervention, and reviews of the existing literature in arriving at these understandings.

Diane Pesco's contribution to the special issue, entitled '*Working With Aboriginal Children and Families: Cultural Responsiveness and Beyond*' reviews concepts and approaches related to culturally responsive instruction, social, and economic justice prevalent in the educational literature and illustrates how these may inform practices in communication sciences and disorders.

Alice Eriks-Brophy's article, '*Assessing the Language of Aboriginal Canadian Children: Towards a More Culturally Valid Approach*' examines questions and issues to be considered when conducting language assessments with Canadian Aboriginal children and provides suggestions for the development of promising assessment practices and approaches that might better represent the communication abilities and capture the existing needs of these children.

Sharla Peltier's article, entitled, '*Assessing Anishinaabe Children's Narratives: An Ethnographic Exploration of Elders' Perspectives'* analyses the narrative skills of Anishinaabe children using two frameworks, one derived from Anishinaabek Elders' perceptions of good stories and the other based on Western perspectives. Her findings illustrate the importance of respecting culturally relevant components of narratives that reflect values surrounding Aboriginal orality.

In their contribution entitled the *'First Nations and Métis Early Literacy and Language Enrichment Program'*, Nausheen Khan and Sandy Paddick describe a pilot intervention program that was developed to address concerns that children from First Nation and Métis backgrounds in two communities in Alberta did not begin school with the readiness skills required for success in the classroom when compared to their non-Aboriginal peers. The intervention program targets narrative and phonological awareness skills.

Isabelle Billard describes the current status of the Hearing and Otitis Program which was first implemented in Nunavik 20 years ago in her article entitled *'The Hearing and Otitis Program: A Model of Community Based Ear and Hearing Care Services for Inuit of Nunavik'*.

Hannah Ayukawa and Andrea Makiuk Roy also describe audiology services and service delivery in Nunavik, providing a review of incidence levels and subsequent treatment of otitis media for the Inuit population and promoting the benefits of providing culturally sensitive services in remote communities of Canada in their article, *'Being Outside of the Box: Audiology in Northern Québec'*.

Jessica Ball and Marlene Lewis provide an analysis of interviews completed with 65 First Nations elders, grandparents, and parents. Their article entitled *'First Nations Elders' and Parents' Views on Supporting Their Children's Language Development'* highlights how knowledge about language, language development, language socialization, and child rearing practices and beliefs inform and shape services provided by speech-language pathologists and audiologists who seek to serve Aboriginal individuals and communities.

Finally, in her article entitled *'A Resource Kit: To Assist Speech-Language Pathologists and Audiologists in Providing Informed Services to First Nations, Inuit, and Métis People'*, Elizabeth Kay-Raining Bird identifies high quality sources of information to be used by beginning and more advanced practitioners who seek to effectively serve individuals of Aboriginal descent in Canada.

The co-editors of this special edition, Alice Eriks-Brophy and Elizabeth Kay-Raining Bird thank the authors for their excellent contributions to the journal and for their perseverance and dedication in completing their manuscripts. We also thank the editorial staff at CJSLPA for their patience in allowing us to bring this effort to fruition. We hope the collected knowledge presented in this special edition will contribute to enhanced service delivery and language outcomes for Canadian Aboriginal children.

Note des rédactrices invitées

Dre Alice Eriks-Brophy et Dre Elizabeth Kay-Raining Bird

NUMÉRO D'ÉTÉ

Ce numéro spécial est le deuxième et dernier d'une série qui a été compilée pour mettre à l'avant-plan les problèmes de prestation de services aux Première nations, aux Inuit et aux Métis du Canada. La première partie avait été publiée à l'été 2011 (Volume 35, RCOA), peu de temps après l'appui accordé par le Canada à la *Déclaration des Nations unies sur les droits des peuples autochtones*, en 2010. Ce document met l'accent sur le droit des peuples autochtones de vivre dans la dignité, de maintenir et renforcer leurs propres institutions, cultures, identités et traditions, et de poursuivre leurs droits à l'éducation, la santé, l'emploi et la langue.

Depuis la publication de la 1ère partie du numéro spécial, plusieurs événements importants, au Canada, ont attiré l'attention du pays sur la situation des peuples autochtones du Canada. Le mouvement Idle No More a uni les voix de beaucoup de communautés autochtones canadiennes et internationales dans leurs réclamations de protection environnementale et de souveraineté indigène. La grève de la faim de la chef Theresa Spence d'Attawapiskat a découlé du mouvement Idle No More et fut entreprise pour exiger une rencontre avec le premier ministre Harper et le gouverneur général du Canada pour discuter des droits des Autochtones, de l'environnement et des crises du logement et des infrastructures à Attawapiskat. La grève de la faim a effectivement mené à une rencontre, mais pas aux changements espérés qu'avait articulés la chef Spence. Le mandat de la *Commission de vérité et de réconciliation* est arrivé à terme. La Commission a étudié formellement l'impact dévastateur du système canadien de pensionnats indiens sur les familles autochtones. Sous la direction du juge Murray Sinclair, la Commission a visité plus de 300 communautés, où elle a documenté les abus, l'endoctrinement culturel et les effets à long terme du système des pensionnats indiens. Plus récemment, le gouvernement conservateur a proposé une loi réformant l'éducation des Premières nations, sous le nom de loi donnant aux Premières Nations le contrôle de l'éducation des Premières Nations, qui portait sur l'amélioration de l'éducation sur les réserves. Même s'il y a consensus général sur la nécessité d'une réforme, le projet de loi fut rejeté par plusieurs leaders autochtones, qui l'ont trouvé réactionnaire, unilatéral et paternaliste. Le conflit concernant le projet de loi a mené à la démission de Shawn Atleo comme chef national de l'Assemblée des Premières nations (APN), et a fait mettre en doute le futur de l'APN elle-même.

Tous ces événements ont sensibilisé et informé le grand public aux questions autochtones canadiennes, mais il faudra beaucoup plus pour atteindre les objectifs ultimes d'initiatives et de mouvements comme ceux qu'on a décrits ci-dessus. L'objet de ce deuxième numéro spécial de la RCOA sur les questions autochtones est de continuer à promouvoir la sensibilisation et la compréhension des connaissances, des compétences et des capacités que les enfants autochtones apportent à leur propre apprentissage et d'éduquer les orthophonistes et les audiologistes de façon à ce qu'ils desservent les enfants autochtones avec plus d'efficacité, de compétences et de succès. Les collaborateurs à ce numéro spécial offrent des idées tirées de la recherche, de l'intervention clinique et de l'examen de la littérature actuelle pour montrer comment on arrive à comprendre ces problématiques.

La contribution de Diane Pesco à ce numéro spécial, intitulée Le travail avec les enfants et les familles autochtones : l'adaptation à la culture et au-delà (*Working with Aboriginal Children and Families: Cultural Responsiveness and Beyond*), passe en revue les concepts et les approches ayant rapport à l'instruction adaptée à la culture et à la justice sociale et économique retrouvées dans la littérature éducationnelle et illustre comment celles-ci peuvent donner forme aux pratiques dans le domaine des sciences et des troubles de la communication.

L'article d'Alice Eriks-Brophy, L'évaluation du langage des enfants autochtones canadiens : vers une approche plus culturellement valide (*Assessing the Language of Aboriginal Canadian Children: Towards a more culturally valid approach*), examine les questions et les problèmes à tenir en compte quand on effectue des évaluations langagières auprès d'enfants autochtones canadiens et fournit des suggestions relatives au développement de pratiques et des approches d'évaluation prometteuses qui pourraient mieux représenter les capacités de communication et capter les besoins existants de ces enfants.

Dans son article intitulé Évaluation des récits d'enfants anishinaabek : une exploration ethnographique de points de vue d'anciens (*Assessing Anishinaabe Children's Narratives: An Ethnographic Exploration of Elders' Perspectives*), Sharla Peltier analyse les compétences narratives d'enfants Anishinaabe à l'aide de deux cadres, l'un dérivé des perceptions des Anciens Anishinaabek de ce que sont de bons récits, et l'autre basé sur des points de vue occidentaux. Ses conclusions illustrent l'importance à respecter les composantes culturellement pertinentes des récits qui reflètent les valeurs entourant l'oralité autochtone.

Dans leur contribution intitulée Programme d'enrichissement précoce de littératie et du langage chez les Premières nations et les Métis (*First Nations and Métis Early Literacy and Language Enrichment Program*) , Nausheen Khan et Sandy Paddick décrivent un programme pilote d'intervention élaboré pour répondre aux préoccupations à l'effet que les enfants provenant de Premières nations et de Métis dans deux communautés de l'Alberta ne commençaient pas l'école avec les compétences préparatoires nécessaires pour réussir à l'école, comparativement à leurs pairs non autochtones. Le programme d'intervention vise à travailler les compétences narratives et la conscience phonologique.

Isabelle Billard décrit l'état actuel du programme Otite et Audition mis en place à l'origine au Nunavik il y a 20 ans, dans son article Le programme Otite et Audition : un modèle de services de soins de santé auditive pour les Inuit du Nunavik (*The Hearing and Otitis Program: A Model of Community Based Ear and Hearing Care Services for Inuit of Nunavik)*.

Hannah Ayukawa et Andrea Makiuk Roy décrivent aussi des services d'audiologie et la prestation de services au Nunavik en faisant un examen des niveaux d'incidence et du traitement subséquent de l'otite moyenne pour la population Inuit et la promotion des bénéfices qu'il y a à dispenser des services tenant compte de la culture dans communautés éloignées du Canada dans leur article intitulé, Être hors des sentiers battus : l'audiologie dans le Nord du Québec (*Being Outside of the Box: Audiology in Northern Québec*).

Jessica Ball et Marlene Lewis donnent une analyse d'entrevues réalisées auprès de 65 anciens, grands-parents et parents des Premières nations. Leur article intitulé Points de vue d'anciens et de parents des Premières nations concernant le soutien visant le développement langagier de leurs enfants (*First Nations Elders' and Parents' Views on Supporting their Children's Language Development*) fait ressortir la façon dont les connaissances touchant le langage, le développement du langage, la socialisation par le langage ainsi que les pratiques et croyances sur l'éducation des enfants alimentent et modèlent les services dispensés par les orthophonistes et les audiologistes qui cherchent à desservir des individus et des communautés autochtones.

Pour finir, dans son article intitulé Une trousse de ressources : pour aider les orthophonistes et les audiologistes à offrir des services éclairés aux Premières nations, aux Inuit et aux Métis (*A Resource Kit: To Assist Speech-Language Pathologists and Audiologists in Providing Informed Services to First Nations, Inuit, and Métis People*), Elizabeth Kay-Raining Bird identifie des sources d'information de haute qualité à l'usage de praticiens débutants et avancés qui cherchent à desservir efficacement des individus de descendance autochtone au Canada.

Les corédactrices de ce numéro spécial, Alice Eriks-Brophy et Elizabeth Kay-Raining Bird remercient les auteur(e)s pour leurs excellentes contributions à la revue et pour leur persévérance et leur engagement à compléter leurs articles. Nous remercions également le personnel de la rédaction de la RCOA pour leur patience et pour nous avoir permis de mener cet effort à bien. Nous espérons que les connaissances collectives présentées dans ce numéro spécial contribueront à améliorer la prestation de services destinés aux enfants autochtones canadiens ainsi que les retombées relatives au langage de ces enfants.

Working With Aboriginal Children and Families: Cultural Responsiveness and Beyond

Le travail avec les enfants et les familles autochtones : l'adaptation à la culture et au-delà

Diane Pesco

KEY WORDS

CULTURAL COMPETENCE

ABORIGINAL EDUCATION

FIRST PEOPLES OF CANADA

SOCIAL JUSTICE

Abstract

Cultural responsiveness is often evoked as an ideal to which service providers for Aboriginal peoples in Canada should aspire. In this paper, the author reviews concepts and approaches related to cultural responsiveness in the literature in the field of education, pointing out how these are parallel with or might further inform practices in communication sciences and disorders (CSD). The drawbacks of approaches focused on cultural responsiveness are also identified, and a complementary or alternate focus on social and economic justice for Aboriginal peoples is discussed and advised.

Abrégé

L'adaptation culturelle est souvent évoquée comme un idéal auquel devraient aspirer les pourvoyeurs de services pour les peuples autochtones du Canada. Dans cette communication l'auteure passe en revue des concepts et des approches, dans la littérature, qui ont trait à l'adaptation culturelle dans le domaine de l'éducation en faisant ressortir à quel point ceux-ci sont parallèles aux pratiques ayant cours dans les sciences et les troubles de la communication (CSD – communication sciences and disorders) ou pourraient davantage donner forme à ces pratiques. Les inconvénients des approches orientées sur l'adaptation culturelle sont également identifiés, et une orientation complémentaire ou alternative sur la justice sociale et économique envers les peuples autochtones est discutée et conseillée.

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Working with Aboriginal Children and Families: Cultural Responsiveness and Beyond

In response to a recent survey about speech, language, and hearing services in Canadian Aboriginal communities, speech-language pathologists (S-LPs) largely agreed that novel approaches are needed to better serve Aboriginal children (Ball & Lewis, 2011). One of the needs expressed by survey respondents was greater awareness of cultural patterns of language and communication to inform both assessment and intervention. Such awareness might be considered an aspect of cultural competence, identified as an important feature of service delivery to First Nations, Inuit, and Métis peoples (Bernhardt et al., 2011; Zeidler, 2011). A recent report on speech, language, and hearing services for Aboriginal people (Speech-Language & Audiology Canada, 2010) also identified cultural competence as a desirable outcome for clinicians. The report appealed to a definition provided by British Columbia's First Nations Health Council (FNHC). According to the FNHC (2009), cultural competency involves not only having knowledge about other cultures but also taking actions which "positively influence and even fundamentally change the way a person or organization operates in order to improve outcomes" (p. 39).

As these reports demonstrate, cultural responsiveness (encompassed in cultural competency) is a central theme in discussions about service provision for Aboriginal children. In the present paper, I discuss culturally responsive instruction in education, introducing some of the ways such instruction is conceptualized and implemented, and drawing parallels between ideas and practices in education and communication sciences and disorders. In the final section I turn to a concern in both fields with 'larger' factors (often referred to as macrosystemic or macrostructural variables) influencing the lives of Aboriginal adults and children.

My interest in the educational literature stems partly from my work experience. Trained as an S-LP, I initially practiced in schools (including local Mohawk schools), and went on to become a university instructor in education, initially teaching occasional courses to Mohawk and Cree preservice teachers and now teaching in an education department, primarily to students who are not Aboriginal. Perspectives within the educational field should be of interest to S-LPs contemplating how best to approach services for Aboriginal children. Familiarity with the literature from education may also help S-LPs achieve common ground with teachers and school administrators, and thus support the preventive, community-based approaches that S-LPs working with Aboriginal communities favour (Ball & Lewis, 2011) and have been recommended within the field (SAC, 2010). Finally, reading widely and across disciplines allows breadth, which I believe is needed for S-LPs to work successfully with Aboriginal children and families and to advocate for services as needed.

It would be helpful for the reader to know that some of the discussion about the cultural responsiveness of teachers and educational institutions is embedded in a literature on 'multicultural education'. This literature does not uniformly address the education of Aboriginal youth, partly reflecting the resistance of Aboriginal peoples to being situated in terms of multicultural policies (St. Denis, 2011). As Lawrence and Dua (2005) describe, many Aboriginal people experience "discomfort and ambivalence … when official policies and discourses of multiculturalism and immigration obscure Native presence and divert attention from their realities" (p. 135). On the other hand, multicultural education is often used as an umbrella term for varied approaches, including approaches that are relevant to the education of Aboriginal children in that they call for changes to school curricula (Banks, 2009), in line with goals expressed by Aboriginal groups in Canada (Assembly of First Nations, 2011); have cultural preservation as their goal (Egbo, 2009), and thus tie in to language maintenance and revitalization efforts in Aboriginal communities (McIvor, 2009); or attend to racism and oppression (Naseem, 2011), which directly affect Aboriginal people (Fleras, 2012). Furthermore, approximately half of Aboriginal youth in Canada attend school in urban areas, most of which are now characterized by high levels of ethnic diversity (Canadian Council on Social Development, 2006; Statistics Canada, 2006). Teachers' and administrators' perceptions of and responses to cultural diversity in these contexts are thus pertinent.

Changing School Curricula

Gérin-Lajoie (2011) contends that the prevailing view of culture amongst Canadian teachers and school principals is "folkoric". Others have referred to a "tourist view" of culture expressed in educational settings as short-lived involvement with foods, folklore, and festivals, all of which aim to be fun (York, 2003). One could argue that social events, music, and visual arts are a good and non-threatening way for children (and adults) to begin to learn about cultures other than their own. The concern expressed in educational circles is not about such 'initiations' per se, but rather about the depth and kinds of cultural knowledge that are ultimately needed to transform education so that it supports all children's success. Banks (2009), amongst others, argues that multicultural education must involve

not only integration of content reflective of students' ethnic origins, but also help students think critically about knowledge: how it is constructed, informed by values and beliefs, and often ethnocentric.

Aboriginal organizations in Canada (e.g., the Assembly of First Nations, 2011) have articulated the need for more substantial changes to curricula and some Aboriginal teachers have expressed frustration with insubstantial ones. As one teacher reported, "[w]hen non-Aboriginal teachers ask us to deal with Aboriginal issues, they expected us to make bannock ..." (St. Denis, 2010, as cited in St. Denis, 2011, p. 314). Another teacher explained that "[a] little content is allowed, nothing substantial, instead of counting sticks, they count buffalo and call that Aboriginal education" (St. Denis et al., 1998, as cited in St. Denis 2011, p. 314). In contrast with these superficial changes are suggestions for incorporating Aboriginal worldviews and values into the education of youth (Toulouse, 2008) and holistic frameworks for lifelong education proposed by First Nations, Métis, and Inuit groups (Canadian Council on Learning, 2007). These frameworks inform us about the values some Aboriginal people have expressed as important in education, including a more holistic view of children, cooperation and communal spirit in learning environments, and an appreciation of spiritual connections amongst people and between people and the natural environment (see, in addition to the works cited above, Battiste, 2010 and Dei, 2011).

The integration of Aboriginal perspectives and languages to curricula for all children has been implemented to a limited extent. Examples include "treaty education", mandated by the Government of Saskatchewan for students from kindergarten to grade 12 (Tupper, 2011), and "Native Language" and "Native Studies" courses available to Aboriginal and non-Aboriginal students in Ontario (Ontario Ministry of Education, 2007). Researchers have also made smaller-scale changes and studied their impact. Kanu (2007), for instance, studied learner outcomes in social studies classes attended by Aboriginal (described as Ojibway, Dene, Cree, Métis, and Sioux) and non-Aboriginal ninth graders. In one class, Kanu and the teacher collaborated to enrich the curriculum and pedagogy, incorporating elements identified by Aboriginal students as important to their own learning. In the other class, the teacher used the standard curriculum (involving limited Aboriginal content) and his usual teaching approach. Aboriginal students in the enriched class showed greater gains in knowledge, and, when interviewed, attributed their performance to both the curriculum and teaching methods.

Another example, with much younger participants, is reported in McIntosh et al. (2011). He and colleagues examined the effects of a language and early literacy program designed to be culturally appropriate for Aboriginal preschoolers, specifically, Nuu-chah-nulth First Nations. The program, an adaptation of the Moe the Mouse® Speech and Language Development Program, was delivered to all kindergarteners defined as 'at risk' based on language screenings. It resulted in gains in oral language for First Nations children as well as for the other children in the program. These studies, as well as others reviewed elsewhere (Baker, 2007), suggest that culturally responsive instruction has positive effects on learning, though the study designs rarely allow one to determine the effects of content changes and pedagogy separately.

Recommendations for the integration of Aboriginal perspectives and practices to curricula derive partly from cultural compatibility theory. Proponents of cultural compatibility theory propose, first, that all children learn "culturally approved" ways of thinking and acting through direct and implicit teaching, guided participation, and social interaction. For some children, however, the beliefs, values, and practices in the home and community differ from those expected at school; the home and school environments are incompatible (Tabachnik & Bloch, 1995) or discontinuous (Kanu, 2007). Compatibility theory predicts that home-school incompatibility will diminish academic achievement.

While cultural compatibility theory remains popular in education and other disciplines, the prediction does not hold universally (that is, home-school incompatibility and high academic achievement can co-occur) (Kanu, 2007), suggesting the theory is incomplete. Also, some claim that the notions of culture informing the theory are too static and lead to stereotyping (Tabachnik & Bloch, 1995). Tabachnik and Bloch also assert that cultural compatibility theory neglects social, political, and economic factors that determine who will succeed. Ways of addressing these concerns of stereotyping and neglect of the sociopolitical and economic context are elaborated below in turn.

Developing Knowledge and Relationships

One of the challenges in developing culturally responsive education or services is diversity within groups. This challenge is particularly salient when thinking about Aboriginal people in Canada, who, in addition to being very diverse in terms of history, language, and other variables across communities (see Kay-Raining Bird, 2011 for a summary), vary further within groups (e.g., within even a single First Nation, one can expect significant diversity). Furthermore, if one defines culture too narrowly or equates

it too strictly with language, there is a risk of considering some Aboriginal children and/or adults as more "authentic" (i.e., as being more representative of their culture) than others. St. Denis (2007) explains how notions of authenticity relate to cultural revitalization, suggesting that revitalization can be a "double-edged sword" (p. 1078) for many Aboriginal teachers:

[Revitalization] has both a positive and negative potential - it can create a positive sense of identity and common cause, but it also applauds some and discounts others. This tension is poignantly evident in the example of Aboriginal teachers, some of whom are very knowledgeable of their cultural traditions and languages and many others who are not - and most often, not by their own choice (p. 1079-1080).

St. Denis also points out the difficulties of revitalization for some Aboriginal parents and grandparents, who "under very difficult colonial and racist conditions did their best to make good decisions for their children, [but] are now told they made the wrong decisions, and that they must now try to reverse language and cultural change" (p. 1078).

Scholars in education do not claim to have resolved the challenges associated with considering beliefs, values, practices, and language along cultural lines. The literature, however, does offer suggestions for how teachers (and by extension, other practitioners) might develop a more nuanced view of culture. Henze and Hauser (1999) suggest that teachers gain specific knowledge about individual students and families, and also increase their awareness of their own cultural context, beliefs, and practices (p. 2). Their second recommendation has been echoed in a number of disciplines (American Psychological Association, 2003; James, 2010; Kumagai & Lypson, 2009). It also informs the goals of a novel course designed to prepare S-LPs and audiologists to work with children and adults in Aboriginal communities, as indicated by learner objectives, such as "develop[ing] a sense of one's own identities" and "[c]onsidering oneself in relation to ... First Nation, Métis, and Inuit people in Canada" (Bernhardt et al., 2011, p. 181).

Henze and Hauser (1999) also propose ways that teachers might bring their "implicit cultural perceptions" (p. 8) to the surface. They suggest that teachers observe activities and events in a specific cultural context and note their own interpretations, ideally followed by discussion with a "cultural interpreter" whose role is to elucidate what the activities and events might mean to the people involved in them. The procedures resemble those used in ethnography, a method widely used in educational research. Although still relatively rare in communication sciences and disorders, ethnography has been used to explore Inuit mothers' ways of socializing language (Crago, Annahatak, & Ningiuruvik, 1993) and Inuit teachers' practices and beliefs regarding classroom discourse (Eriks-Brophy & Crago, 1994). More recently, Peltier (2010; see also this volume) integrated ethnographic methods by asking Anishinaabek (more specifically, Ojibway) adults to consider local children's narratives in light of Anishinaabe oral traditions. While S-LPs might use elements of ethnography to inform their practice, the method requires considerable time and opportunities for observations and analysis, and would therefore likely work best for S-LPs that are non-itinerant and working long-term in a setting or community. However, even S-LPs with less extensive contact can reflect on their own perceptions and values and how they shape everyday interactions with children and families from various cultural groups.

In order for teachers to better know their students and their families, interviews of various kinds have also been proposed. These might be more feasible for S-LPs than extensive observations in homes and communities and can build on basic interviewing skills learned as part of clinical training. Henze and Hauser (1999), for example, suggest open-ended interviews of parents and family visits for learning about families' "funds of knowledge", a term originally coined by Moll to describe the knowledge and skills community members have and deem important to their "personal and cultural survival and well-being" (Moll, Amanti, Neff, & Gonzalez, 2001, p. 12).

Family stories have also been gathered in research projects and recommended as a means of deepening home-school relationships. In Hones (2000), preservice and in-service teachers wrote autobiographical stories of their own connections to language, culture, family, and education, and then connected them with stories shared voluntarily by immigrant families. As part of their research, Edwards and Turner (2010) used a semi-structured interview to elicit "parent stories" from African-American mothers about their child's experiences at school, with previous teachers, and with literacy (the interview questions are provided).

Although not designed specifically with Aboriginal people in mind, the approaches for establishing dialogue as suggested in the educational literature can be adapted by S-LPs in consultation with the people in the communities in which they work. An example is Zeidler's (2011) informal interviews of women of the Lil'wat Nation in British Columbia. In answer to just two questions (indicating that questions need not be numerous but, rather, important to

the interviewees), participants elaborated on the qualities and approaches they valued in professionals new to the community, including but not limited to an authentic interest in the place and the people.

Case studies reported in the research literature in education might also be used as a means for practitioners to reflect on other cultures and bring their own views and assumptions to light. For example, Cleghorn and Prochner (2010) used ethnographic methods to study three early childhood settings: an Aboriginal Head Start setting in a First Nations community in Canada, and preschools located in semi-rural towns in South Africa and India. The authors describe the curriculum, social relationships, materials, and organization of space and time in each setting, and consider how these features relate to local perspectives on what is good for children, as well as to "western-centric" (p. 127) views, reflected in government policy on education and language.

Case studies like these could be used to stimulate discussion amongst S-LPs 'in training' or undertaking professional development, or could serve as a starting point for dialogue between S-LPs and Aboriginal parents or educators about what each deems important in terms of children's development and education.

In summary, observations, interviews, autobiographical stories, and case studies have been suggested to raise educators' awareness of their own perspectives and biases, allow educators to get to know families and communities and identify their resources and strengths, and develop relationships and trust. The assumption is that gains in these areas will contribute to culturally responsive instruction. With respect to clinical practice, the reasoning is similar; as S-LPs and audiologists expand their knowledge and engage in dialogue with Aboriginal people, they will be better placed to develop culturally responsive assessments and interventions. Theorists and practitioners in both education and health care, however, have suggested that the current emphasis on culture responsiveness needs to be complemented by a deeper understanding of how social and economic factors shape a wide range of outcomes for all children.

Going Beyond Cultural Responsiveness

While Aboriginal people are strong and resilient, and diverse in terms of socioeconomic status, they also, on average, have fewer employment opportunities and are living in greater poverty overall in comparison with other Canadians (Kay-Raining Bird, 2011; Wilson & Macdonald, 2010). Poverty and its correlates (substandard housing, lower education levels, higher rates of particular health conditions, greater exposure to environmental contaminants, higher substance abuse etc.) undermine the well-being of Aboriginal children living on and off reserve in both remote and urban environments (Ball, 2008; Campaign 2000, 2011; Canadian Council on Social Development, 2006).

St. Denis (2007) suggests that disparities like these call for an analysis of how race is related to the history and contemporary situations of Aboriginal people. Proponents of such an analysis, and of anti-racist approaches more generally, agree that race is a socially-constructed (not biological) category but nevertheless "real" in that it operates in societies, and is used both to create and justify exclusion of various sorts (i.e., social, political, and economic). From an anti-racist perspective, the conditions faced by Aboriginal people today are a consequence of the racism inherent to colonisation and subsequent institutional racism (examples include the residential school system; the current overrepresentation of Aboriginal youth in the criminal justice system noted by Latimer and Casey Foss, 2004; and the recently documented underfunding of Aboriginal schools). The conditions also reflect neoliberal economic policies that result in disproportional poverty and insecure incomes (associated with increased precarity of work) for Aboriginal people, along with other 'racialized' groups (Patychuk, 2011).

Anti-oppressive approaches in education also involve an examination of race, but focus more heavily on interlocking aspects of oppression (e.g., how racism, classism, sexism, etc. interact) (see Naseem, 2011 for an overview). The nuances of each approach and the significant differences between them lie outside the scope of the present paper, but might be seen as roughly aligned with the tenets of *social justice*, defined by Nieto and Bode (2007) as a philosophy and actions that promote a more equal distribution of social and economic resources and "embody treating all people with fairness, respect, dignity, and generosity" (p. 12).

Anti-racist, anti-oppressive, and social justice education is not just for children or adolescents. University instructors draw on related philosophies and theories to examine social and economic inequalities with adult students, and to explore how these disparities are expressed at different levels, ranging from the global to the micro level of everyday interactions. Kumugai and Lypson (2009), for example, reported several strategies they used to help medical students develop "a reflective awareness of... power and privilege and the inequities that are embedded in social

relationships" (p. 783). University teachers in social work report similar goals, and additionally address ways of working with the resistance or discomfort that even adult students can experience when discussing issues of privilege and oppression (Nicotera & Kang, 2009; Sakamoto & Pitner, 2005; Wong, 2004).

Issues of race, oppression, power, and privilege have also been raised in the communication disorders literature. In a novel course for S-LP and audiology students alluded to earlier (and described at length in Bernhardt et al., 2011), instructors sparked discussion about racism partly by using documentaries, including a publicly available one on residential schooling (Legacy of Hope Foundation, cited in Bernhardt et al., 2011) and another on First Nations university students' experiences with racism[1]. The students in the course also keep private journals or used visual or performing arts to express their feelings, thoughts, and questions related to learning about "cultural identities, colonialism, racism and race-based privilege" (p. 183), and reflect on the potential impact of these on service provision.

Ball has also introduced to the communication disorders literature the notion of "cultural safety". The concept, initially proposed by Ramsden, a Maori nurse in New Zealand, is now being applied to a range of health services in Aboriginal communities in Canada (Health Council of Canada, 2012). As Ball (n.d.) explains, cultural safety is about what service recipients think and feel about service encounters: whether they feel "respected and assisted in having their cultural location, values, and preferences taken into account" (p. 1), or, conversely, unsafe or harmed. Other authors define cultural safety similarly and identify variables contributing to it as awareness on the part of service providers of power dynamics in service encounters, informed by an awareness of the unequal distribution of power and resources on a larger scale (Anderson et al., 2003; Health Council of Canada, 2012; National Aboriginal Health Organization, 2006).

Conclusion

As this brief review reveals, there are multiple perspectives within the educational field about what it means to be culturally responsive and what is needed to support positive outcomes for Aboriginal children. Recurring responses to 'what adults in the field should be doing' include making significant changes to curricula and pedagogy, developing knowledge about and relationships with families, and learning about how social and economic inequities arise and affect Aboriginal people's and all of our lives. These responses converge with those found in the communication sciences and disorders literature.

The review, as anticipated, does not point to a single set of actions that S-LPs should take in working with Aboriginal children and families. School curriculum changes, discussed in the first section of the paper, are typically not made by either educators or S-LPs, but S-LPs can play a role by contributing their knowledge about language and literacy to early childhood and later educational programs. Aboriginal Head Start (AHS), described by Ball (2008) as "one exception to an otherwise sluggish effort to ensure Aboriginal children have the same quality of life as other children in Canada" (p. 30), and named as a promising practice in health care for Aboriginal mothers and young children (Health Council of Canada, 2011), is likely a good starting point. While the program is still only available to a minority of Aboriginal children, existing centres might allow S-LPs to collaborate with educators in providing global support for language development and learning (in lieu of individual, pull-out interventions). When curricula for older children has been adjusted to be somewhat 'culturally responsive', S-LPs could adopt a curriculum-based intervention approach, thus incorporating curricular content and objectives into language therapy. S-LPs could also benefit from exploring further the pedagogical practices that have been recommended in the literature on Aboriginal education, while being careful not to assume that all Aboriginal children share a single learning style.

The literature offered a number of suggestions and examples of ways that educators and clinicians alike can reflect on their own views and come to better know the communities and families they are working with. These need no additional summary, but the cited papers and book chapters should serve as resources.

Finally, the review revealed that social and economic inequities affecting Aboriginal people are widely discussed in the literature from education and health care, though the terminology varies across the two sectors, and the theoretical bent varies considerably by author. A greater understanding of these inequities and their causes can be fostered by university level courses like the one developed by Bernhardt and colleagues, as well as introductory, cross-disciplinary courses in First Peoples Studies (e.g., http://scpa-eapc.concordia.ca/en/undergraduate-programs/major-in-first-peoples-studies/). Of course, there are also independent acts: reading, watching documentaries, attending talks, discussing with friends, analysing media, becoming involved with Aboriginal organizations or activists. These activities, along with the

others proposed, can help us all become more critical thinkers. They will also prompt us to stand - not only as S-LPs or educators, but as citizens - for economic, social, and health care policies that respect the rights of Aboriginal children and their families, and foster social and economic justice at large.

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End Notes

[1] The authors additionally produced a number of digital videos especially for the course. These address speech-language and audiological services in First Nations and Inuit communities (particularly rural ones) and include 'case scenarios' and interviews with First Nations service providers (Bernhardt, 2012, personal communication). Some of the videos might be made available for training purposes. Requests should be directed to Bernhardt.

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Assessing the Language of Aboriginal Canadian Children: Towards a More Culturally Valid Approach

L'évaluation du langage des enfants autochtones canadiens : vers une approche plus culturellement valide

Alice Eriks-Brophy

KEY WORDS

ABORIGINAL CHILDREN
LANGUAGE ASSESSMENT
STANDARDIZED TESTING
CHILD-CENTERED ASSESSMENT
ASSESSMENT BIAS
PROMISING ASSESSMENT PRACTICES AND APPROACHES

Abstract

This article discusses questions and issues to be considered when conducting language assessments with Canadian Aboriginal children. Commonly used assessment practices that range from standardized testing to child-centered approaches, along with their strengths and limitations and evidence that might support or call into question their continued use with Aboriginal children are presented. Suggestions for the development of promising assessment practices and approaches for these children are proposed that might better represent the communication abilities and capture the existing needs of Canadian Aboriginal children.

Abrégé

Cet article discute des questions et des problèmes à prendre en compte quand on fait des évaluations du langage auprès d'enfants autochtones canadiens. On présente les pratiques d'évaluation communément utilisées, qui vont des tests standardisés aux approches centrées sur l'enfant, ainsi que leurs forces et leurs limites, et la preuve qui pourrait soutenir ou mettre en doute leur utilisation avec des enfants autochtones. On propose des suggestions pour le développement de pratiques et d'approches d'évaluation prometteuses pour ces enfants, qui pourraient être plus représentatives des habiletés de communication et capter les besoins actuels des enfants autochtones canadiens.

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The Language Assessment of Aboriginal Children

Many questions and issues surrounding the valid and unbiased language assessment of Aboriginal[1] children are unresolved. No test administration principles or procedures deemed to be appropriate to the assessment of First Nations, Métis, or Inuit children, who have been referred for potential language difficulties and who present with a variety of communication and behavioral characteristics, have been agreed upon in order to ensure that these children receive an appropriate and culturally valid assessment. This situation is compounded by a lack of culturally adapted test tools, the lack of accessible services in speech-language pathology (especially from culturally competent clinicians), and the diversity of the cultural, linguistic, and geographic environments represented by Aboriginal communities; all of which complicate the situation surrounding the appropriate and accurate assessment of Canadian First Nations, Métis, and Inuit children (Speech-Language & Audiology Canada (SAC), 2010). The development of a more culturally valid approach to the assessment of Aboriginal children is therefore urgently needed and requires careful deliberation and discussion.

Reasons for conducting communication assessments include screening for potential speech and language problems, establishing a baseline level of functioning, establishing goals for intervention, and measuring changes resulting from intervention (Hegde & Maul, 2006; Hegde & Pomaville, 2013; Owens, 2010; Paul & Norbury, 2011). Areas typically considered for assessment by the speech-language pathologist (S-LP) include production and comprehension in the domains of the content, form, and use of language (Bloom & Lahey, 1978; Hegde & Maul, 2006; Owens, 2010; Paul & Norbury, 2011). The assessment of language ability and communicative functioning may be carried out in a number of different ways and in a variety of combinations. The most common approaches to assessment used in speech-language pathology are standardized testing, questionnaires and rating scales, criterion referenced procedures, language sampling, and dynamic assessment. These approaches might be perceived as falling along a continuum of what Hedge and Maul (2006) refer to as 'standardized' to 'child-centered' or 'traditional' to 'alternative' or 'informal' approaches. All of these approaches have a potential role in the assessment process and have certain advantages; however, if not given proper consideration and examination they also entail certain inherent limitations when used with Aboriginal children. While the evidence base to support their effective use with this population of children is sorely lacking, these approaches and procedures are nevertheless currently being widely used in assessing Canadian Aboriginal children. Many of these approaches and procedures are open to various forms of assessment bias that have the potential to result in incorrect interpretations of performance and misdiagnoses that may impact the perceived need for services and subsequent placement decisions (Hilton & Mumma, 1991; Peña & Quinn, 1997; Stockman, 2000). Questions for consideration in assessing Aboriginal children include issues surrounding the appropriate use and scoring of existing standardized tests, the potential utility of developing new assessment tools that might be more applicable to the population, and the desirability of adopting alternative perspectives on assessment for these children that may be more likely to ensure they receive a culturally valid appraisal, all of which will be discussed in more detail in the sections that follow.

The Aboriginal Context

Much has been written about the social, political, educational, and health issues faced by the Aboriginal peoples of Canada at the present time. The geographic diversity in which Aboriginal children currently reside, which includes both urban and remote on and off-reserve settings, has an important impact on current issues faced by Aboriginal Canadians. Recent statistics show that approximately 50% of Aboriginal Canadians live in urban areas, and the remaining 50% live on reserves and in rural non-reserve areas (Statistics Canada, 2007). Issues faced by Aboriginal communities include high unemployment rates and reduced levels of income, poor housing conditions, complex health challenges, and a higher incidence of disabilities and acute illnesses than individuals in the general Canadian population (Assembly of First Nations, 2008; SAC, 2010; Guider, 1991; Health Canada, 2003; Mendelsen, 2006; Statistics Canada, 2006). These problems are particularly acute for individuals living on reserves. This is significant as it has been demonstrated that economically disadvantaged individuals are at greater risk for disabilities and that the etiologies of these disabilities often overlap with poverty (Thomas-Presswood & Presswood, 2008; Roseberry-McKibbin, 2008). Aboriginal peoples are also more likely to experience poorer mental and social health than the general Canadian population, the effects of which can create complex challenges for Aboriginal children and their families (Assembly of First Nations, 2008; SAC, 2010; Health Canada, 2003). Aboriginal children in general, and particularly those residing in remote and isolated communities in Canada, are also reported to have substantially reduced educational outcomes, in terms of the numbers of students attaining a high-school education as well as enrollment in post-secondary

academic institutions, when compared to their non-Aboriginal peers (SAC, 2010; Canadian Language and Literacy Research Network, 2007; Mendelsen, 2006; Ontario Ministry of Education, 2006; Statistics Canada, 2006).

At the present time we have little research that has examined the etiology of communication difficulties, their type and severity, or the existing need for S-LP services in Canadian Aboriginal communities (SAC, 2010). However, the incidence of children and youth with speech and language difficulties in Aboriginal communities is reportedly quite high (SAC, 2010; Findlay & Kohen, 2013). Speech and language skills are crucial components of academic, vocational, and social success, all of which constitute important determinants of health (SAC, 2010; Paul & Norbury, 2011; World Health Organization, 2007). Deficits in speech and language propagate throughout a child's lifetime, with increasingly negative consequences for learning, employment, and social and personal adaptation. One source of potential assistance to enhance the educational outcomes of Aboriginal children lies in the provision of culturally appropriate speech and language assessment and intervention services to support language development and learning, beginning at an early age. Early identification and intervention services for children with speech and language difficulties have been shown to result in long-term improvement in communication development and educational achievement (Law, Garrett, & Nye, 2004; Paul & Norbury, 2011). Such benefits should be extended to all children residing in Canada, including those living in Aboriginal communities. Unfortunately, many Aboriginal community members have limited access to all types of health and child care services, preschools, and daycares and may experience serious obstacles to obtaining access to appropriate S-LP assessment and intervention services in particular (Ball, 2009; SAC, 2010; Eriks-Brophy, Quittenbaum, Anderson, & Nelson, 2008; Trumper, 2004).

More than 50 Aboriginal languages are spoken in Canada, and in some communities the traditional language is used as the primary mode of communication and of education (Cook & Flynn, 2008; McIvor, 2009; Norris, 2008). In these communities, children arrive at school fluent in their home language and with limited exposure and ability to speak in either English or French (Ayukawa, this volume; SAC, 2010; Norris, 2008). Linguists and S-LPs working in Aboriginal communities in Canada have also identified aspects of dialect use involving phonological, semantic, and syntactic variants from mainstream Canadian English that are often referred to as First Nations English Dialect (FNED) (Ball, Bernhardt, & Deby, 2006; Kay-Raining Bird, 2011; Peltier, 2011, this volume). Differences between standard English and local dialect use would be expected to have an important impact on assessment results and their interpretation in the areas of speech and language. Many communities are implementing language revitalization strategies with the goal to revive and preserve their local languages so they will thrive and flourish for future generations (Aboriginal Language Initiative, 2011; McIvor, 2009; Statistics Canada, 2004). These revitalization strategies include educational programs where pre-school and school age children are taught all or a portion of their daily education in the Aboriginal language beginning as early as the daycare years, with the goal to foster bilingualism and biculturalism (McIvor, 2009; Norris, 2008; Statistics Canada, 2006). The diversity of Canadian Aboriginal communities is described in greater detail by Kay-Raining Bird (2011).

Cultural Considerations in Language Assessment

In light of the wide range of linguistic, cultural, and living contexts in Aboriginal communities across the country and the current lack of evidence regarding best practices in assessment, it is necessary to make inferences from research with other populations including unilingual Euro-Western children representing the dominant culture, as well as non-Aboriginal bilingual children and/or minority language/culture children. Conducting an appropriate assessment also involves an awareness of the language socialization practices, the preferred learning styles of Aboriginal children, and the sources of potential bias inherent to many components of the assessment process in speech-language pathology, including in particular the use of standardized assessment instruments and procedures, which have the potential to misidentify and misdiagnose Aboriginal children (Ball, 2009; SAC, 2010).

A large body of existing research has documented considerations related to the assessment and interpretation of the communicative performance of bilingual and culturally and linguistically diverse (BLCD) children. Best practices with respect to the assessment of BCLD children provide highly relevant insights that should be taken into consideration in the assessment of Aboriginal children. Considerations regarding the non-discriminatory assessment of bilingual Aboriginal children parallel many of those principles and suggestions contained in the literature for the appropriate assessment of BCLD children in general. These principles involve issues regarding the specific nature of the assessment tools to be used as well as the manner in which these assessments should be administered. General descriptions of culturally valid assessment in speech-language pathology highlight several well-known guiding principles that are summarized in SAC's position paper on

speech-language pathology and audiology assessment and intervention in multicultural and multilingual contexts (Crago & Westernoff, 1997).

A primary clinical decision to be determined through the communication assessment of BCLD children is whether the child's observed language and learning difficulties are to be attributed primarily to language differences or if they instead constitute a disorder (Hedge & Maul, 2006; Kohnert, 2008; Paradis, Genesee & Crago, 2011; Paul & Norbury, 2011; Roseberry-McKibbin, 2007). A determination of language disorder can only be made with reference to the language-learning context of the child, and must be based on evidence that the disorder is present in all languages used by the bilingual/multilingual child (Brice, 2002; Kayser, 2002; Kohnert, 2008; Paradis et al., 2011). Arriving at an appropriate clinical judgment about the presence or absence of a possible communication disorder involves the examination of numerous factors related to both children and their parents (Crago & Cole, 1991; Rhodes, Ochoa, & Ortiz, 2005; Roseberry-McKibbin, 2008). *Child factors* to be taken into consideration include, among others, the family constellation, the home language environment, the amount and extent of the child's exposure to the second language, the child's language dominance and fluency in the languages of interest, and the child's educational history and patterns of school attendance. Relevant *parental variables* include their own educational histories and educational levels, their degree of proficiency and literacy in the languages of interest, their employment schedules and responsibilities, their ability and opportunity to assist the child with learning tasks, and the language input and exposure they provide to their children in the home.

The high incidence of fluctuating or permanent hearing loss in Aboriginal children is another primary consideration when conducting a communication assessment. While the statistics related to hearing loss in children vary across Aboriginal groups, some children experience significant episodes of auditory deprivation associated with acute or chronic otitis media, with Inuit children being highly susceptible (Ayukawa, this volume; Ayukawa, Belanger & Rochette, 2008; Ayukawa, LeJeune & Proulx, 2004; SAC, 2010; Langan, Sockalingham, Caissie, & Corsten, 2007). The child's hearing status has the potential to have a negative effect on performance that may be incorrectly interpreted as a lack of communicative competence. Verifying a child's hearing status is an important consideration when initiating any form of assessment.

An awareness of the language socialization practices in operation in the child's family and community is another important consideration in determining whether an Aboriginal child presents with a language disorder or a language difference. These practices vary across Aboriginal contexts and communities, and it is therefore essential that the clinician become familiar with local practices and beliefs surrounding children as communicators and take these into consideration when organizing a language assessment. Such detailed knowledge of community-based speech and language characteristics and practices is needed to reduce the possibility of over-diagnosis of communication difficulties in Aboriginal children. An extensive body of literature conducted primarily in the 1970s and 1980s has shown that Aboriginal groups may differ from the North American mainstream model in their ways of viewing the roles of children within their society and, correspondingly, in the ways that children are socialized to use language in communicative interactions. This literature has documented how cultural values including the avoidance of competition, a focus on group orientation versus individualism, the organization of turn-taking, the role of silence, and the maintenance of appropriate interactional hierarchies influence the organization of communicative behavior between adults and children in many Aboriginal communities (Au & Jordan, 1981; Crago, 1988; Erickson & Mohatt, 1982; Eriks-Brophy, 1998; Eriks-Brophy & Crago, 1994; 2004; Jonk & Enns, 2009; Philips, 1983; Scollon & Scollon, 1981). Other cconversational elements including politeness forms, the appropriateness of conversational topics, and the use of praise and reinforcement are also open to cultural assumptions and misinterpretations that might lead to potential bias when conducting a communication assessment of an Aboriginal child (Crago, 1988; Erickson & Mohatt, 1982; Eriks-Brophy, 1992, 1998; Eriks-Brophy & Crago, 1994; 2004; Lipka, 1991; Philips, 1983; Scollon & Scollon, 1981).

Cultural variation has also been found to exist in the use of nonverbal communicative behaviors such as eye gaze, personal space, touching, and back channel signalling (Eriks-Brophy, 1998; Erickson & Mohatt, 1982; Eriks-Brophy & Crago, 1994; Lipka, 1991; Philips, 1983). A child's use of nonverbal communicative behaviors, and particularly the use of eye gaze, are typically observed and recorded as part of a communication assessment (Hedge & Maul, 2006; Paul & Norbury, 2011). For example, cultural differences in the appropriateness of direct eye contact between a child and an adult in particular have the potential to lead to serious misinterpretations of a child's performance during a communicative interaction, regardless of the assessment approach used.

Research findings related to the language socialization of various groups of Aboriginal children in Canada in

particular emphasize the potential of various forms of questioning to have a significant impact on performance in communication assessments. One-on-one conversations with adults, speaking alone as opposed to in a group, and an emphasis on individual oral performance are dimensions of the testing situation that may be unfamiliar to children from some Aboriginal communities, and particularly to Inuit children of Nunavik (Crago, 1988; Crago, Eriks-Brophy, Pesco & McAlpine, 1997; Eriks-Brophy & Crago, 1994; 2004). Other competencies of particular importance to the assessment of communicative abilities with Aboriginal children include experience in producing a narrative and responding to known-answer questions, both of which would have significant effects on children's performance on any type of language assessment. For example, Inuit children in Nunavik may not have received extensive practice in these abilities outside of the school context or prior to school entry (Crago, 1988; Eriks-Brophy, 1992; 1998).

Finally, Aboriginal children may display different cognitive learning styles or learning preferences when compared to those of non-Aboriginal children (for a review, see Rasmussen, Baydala & Sherman, 2004.) Learning styles reflect how individuals approach different learning tasks (Smith & Shade, 1997) while learning preferences represent different ways of perceiving, processing, and organizing information (Appleton, 1983; Pepper & Henry, 1986; Ryan, 1992; Simmons & Barrieau, 1994). A number of studies have demonstrated that cultural differences exist in how individuals 'come to understand the world' (Appleton, 1983). These differences are described as being a direct consequence of the communicative and interactional norms and values that are emphasized within a cultural community (Rasmussen, Baydala & Sherman, 2004). Aboriginal children have been reported to demonstrate strengths in visual-spatial abilities and to show preference for cooperative, collaborative, group oriented learning and hands-on educational activities as opposed to individual or competitive tasks and approaches (Kleinfeld, 1971; Nuby & Oxford, 1998; MacArthur, 1975; Simmons and Barrieau, 1994; Smith & Shade, 1997). Aboriginal children have also been described as being holistic learners, perceiving and learning about the world from whole to part, as opposed to building knowledge through assembling discrete parts into a whole. Respecting elements of these preferred learning tasks and styles in teaching is suggested to contribute to more successful outcomes among Aboriginal students. These elements also have implications for adapted communication assessment and intervention practices that might contribute to optimal descriptions of children's competence and abilities (Rasmussen, Baydala & Sherman, 2004).

It should be noted that some of the literature reviewed above is relatively dated and may be perceived as promoting stereotypes regarding Aboriginal children's preferences and thought processes. More recent research into these domains is required in order to determine the extent to which language socialization practices and learning strengths and differences currently exist in various Aboriginal groups and how these differences might impact the assessment process in speech-language pathology. It is also important that the practitioner recognize that the Aboriginal population in Canada is widely variable in language and culture, and that within each cultural group there exists a great deal of variability and diversity. This diversity makes it impossible to identify a set of normal learning and communicative behaviors or a preferred learning style that would characterize all Aboriginal children, or any other heterogeneous cultural grouping. To suggest that an individual's cognitive attributes are fixed or predetermined by their cultural and linguistic background and that learning strategies must always be matched to individual preferences does not assist students to learn alternative approaches to acquiring new knowledge, limits their life chances, and is an essentially discriminatory perspective. Individuals representing any cultural group do not necessarily have only one learning style, and students can be expected to thrive from being exposed to and proficient in using a variety of learning strategies.

Nevertheless, there is the potential for miscommunication and misinterpretation to occur when the clinician's communication and cognitive styles differ from those of the child being assessed (Crago & Cole, 1991; Cummins, 1989; Erickson, 1987, Eriks-Brophy, 1998). Awareness and sensitivity to such issues on the part of the clinician may allow for the organization of an assessment protocol that reduces or prevents opportunities for such negative consequences to arise. This has particular relevance for the child-centered assessment approaches that are described in more detail below, where the child's ability to respond to the structure, organization, and social interaction surrounding the teaching of the task and the strategies applied to the learning of the task form the basis of the evaluation of the child's communicative abilities.

Assessment Bias

An article by Taylor and Payne originally published in 1983 remains an excellent source for the description of potential forms of bias in the S-LP assessment of BCLD children that are highly relevant to the assessment of the communication abilities of Aboriginal children. Taylor and Payne (1983) describe biases related to the referral source, the examiner,

and the measures and procedures used, all of which have an important impact on the interpretation of assessment results. *Referral source* bias suggests that the individual referring a child for assessment has differing perceptions and understandings regarding what might be considered 'normal' as opposed to 'disordered' abilities in a particular domain that contrast with those in operation in the child's community of origin. *Examiner bias* involves the (usually unconscious) projection of the examiner's cultural beliefs, assumptions, attitudes, and values onto individuals of other cultures, assuming that all individuals share their world view. *Bias in test procedures and materials* has been described in detail in a variety of sources (Hilton & Mumma, 1991; Peña & Quinn, 1997; Stockman, 2000), and consists of situational bias, value bias, and linguistic bias. *Situational bias* refers to the testee's unfamiliarity with the framework of assessment procedures and the communicative and interactional routines implicit to the assessment process. *Value bias* refers to unfamiliarity with situations in the assessment that imply a certain preference or a value judgment, to which the child is expected to respond. *Linguistic bias* refers to a lack of familiarity with the language or dialect in which the assessment is being conducted. While dialectal features are not considered to be a form of disordered speech, S-LPs may have unconscious prejudices regarding dialect use or lack information about local dialects. Without knowledge of the local dialect, many dialectal responses would be scored as incorrect based on information contained in the examiner's manuals of most speech-language pathology assessment tools.

Reports of the potential for bias in test procedures and materials to negatively influence the assessment performance of Aboriginal children in general, and northern Aboriginal children in particular, have been primarily anecdotal. Since Northern Aboriginal children often have more limited exposure to aspects of the dominant Canadian culture, this would have the potential to influence their assessment performance. Examples of test bias specifically related to the use of standardized tests with children from three remote First Nations communities in Northern Ontario were collected as part of an investigation of the applicability of the use of videoconferencing for assessing speech and language abilities in these communities (Eriks-Brophy et al., 2008). Ten children who ranged in age from 8 to 14 and who had no suspected or identified speech, language, hearing, or learning difficulties were asked to provide answers to selected test items taken from the *Peabody Picture Vocabulary Test*, third edition (PPVT-3) (Dunn & Dunn, 1997), the *Preschool Language Scale*, fourth edition (PLS-4) (Zimmerman, Steiner & Pond, 2002), the *Clinical Evaluation of Language Fundamentals*, fourth edition (CELF-4) (Semel, Wiig & Secord, 2003), the *Expressive One Word Picture Vocabulary Test* (EOWPVT) (Brownell, 2000) and the *Structured Photographic Articulation Test* (SPAT-D) (Dawson & Tattersall, 2001).

Bias in test materials was found to be associated with several of the above mentioned standardized tests. On the *PPVT-3*, the majority of children were unable to identify items such as hydrant, exercise, calculator, and signal. On the *CELF-4*, 5/10 children had difficulty formulating sentences based on pictures contained in the test that depicted unfamiliar events, including children crossing the street at a traffic signal, a policeman directing traffic, a blind man with a seeing-eye dog, and students observing a lesson in a chemistry lab. The children also had difficulty explaining how zoo, farm, and sea animals were related. On the *EOWPVT*, many of the children had difficulty identifying test items that were unfamiliar to their experience including aquarium, pineapple, cactus, stadium, greenhouse, and hurdle. On the *SPAT-D*, the way in which the test stimuli were presented, using a dog to elicit the desired vocabulary, distracted the children from the purpose of the task. Rather than producing the target words, 8 of the 10 participating children instead spontaneously commented that many of the stimuli were "weird" because the dog in the pictures was being treated as a person or had been placed in situations they found silly, unusual, or even "creepy". The children made comments such as "dogs don't wear people clothes or sleep in beds", and found it strange and unsettling that "that dog is living like he's a kid".

Several items on the *PLS-4* were found to contain value bias. These items involved instances where children were shown a picture of a situation and were asked to comment on what the child in the situation 'should do'. For the item in which the child is expected to ask her father's permission to play outside with her friend, the children typically provided responses such as "She can just go", "I can go" or "I will go", as asking permission for such activities is not part of the daily experience of children living in many remote communities who are given a substantial amount of individual freedom.

Approaches to Language Assessment

Typical language assessment paradigms used in speech-language pathology can be described as falling along a continuum ranging from standardized or formal testing to child-centered approaches that include criterion referenced procedures, questionnaires and rating scales, language sampling and narrative assessment, and dynamic assessment. Some of these approaches have reportedly

been used effectively in assessing BCLD children, however little evidence supporting their appropriate and effective use with Aboriginal children currently exists. The strengths and limitations of these commonly-used assessment approaches along with evidence that might support or call into question their continued use with Aboriginal children are presented in the sections that follow.

Standardized Assessment Measures

Standardized testing is the most common approach used to diagnose communication difficulties in both children and adults, and is often described as the 'gold standard' for this purpose (De Lamo White & Jin, 2011; Hegde & Maul, 2006; Paul & Norbury, 2011; Roseberry-McKibbin, 2007). Advantages of this approach include its perceived objectivity, the availability of standard, age-equivalent and other derived scores that can be used to compare an individual's performance to that of a representative sample of peers as exemplified by the normative sample, and its relative ease and convenience of administration, as stimuli and instructions are pre-determined and are contained in the administration manual and materials. Performance scores on standardized measures are typically used to determine an individual's degree of communication deficit and may be required by administrators to permit access to S-LP services (Hedge & Maul, 2006; Kohnert, 2008; Paul & Norbury, 2011).

In spite of these proposed advantages, problems with the use of standardized tests in speech-language pathology have been widely discussed in the literature. One major criticism revolves around the use of normative samples to interpret the performance of children from diverse cultural or language backgrounds (Hedge & Maul, 2006; Hedge & Pomaville, 2013; Kohnert, 2008; Roseberry-McKibbin, 2007). Standardized measures have potentially serious limitations when used with Aboriginal children in particular as a result of unrepresentative normative samples and Western (most often US) perspectives. Even when the normative sample includes children of Aboriginal descent, the numbers are typically small and the normative data are therefore likely to be unrepresentative. Additional difficulties in using standardized language tests with Aboriginal children include the multiple areas in which assessment bias may interfere with the accurate interpretation of test performance as described above, including in particular the scoring of test items that are deemed to be culturally insensitive or potentially affected by dialect differences.

Information obtained from standardized testing has been criticized for not providing a complete and detailed picture of an individual's communicative competence and/or linguistic skill across a variety of contexts and language modalities, for not being reflective of communication abilities in real-life interactions, and for not providing sufficient and relevant information for the establishment of intervention goals (Losardo & Syverson, 2011; Roseberry-McKibbin, 2007). Since the primary purpose of standardized tests is the diagnosis of a potential language disorder, these may not be limitations of standardized tests per se; nevertheless clinicians often attempt to extract such information from the results of standardized assessments, resulting in a limited interpretation of a child's communicative abilities. A summary of potential advantages and disadvantages of the application of standardized testing in the assessment of Aboriginal children is provided in Appendix A.

Existing Practices Used to Minimize Standardized Test Bias. In an attempt to reduce the impact of cultural, value, and/or linguistic biases of standardized tests, one common practice being used by some S-LPs working with Aboriginal children is to score certain items in a different manner from that stipulated by the test, either giving credit for failed items based on known information about the child or the community or to accommodate characteristics of the local dialect. This practice was reported as being relatively widely used during a discussion about assessment practices held at the 2009 SAC Convention Special Interest Group of S-LPs and audiologists serving First Nations, Métis, and Inuit communities, as well as during discussions at a seminar about assessment and intervention practices for Aboriginal children presented at SAC in 2011 by Eriks-Brophy and Pesco. Hedge and Maul (2006) point out that, while this may well be a temporary and well-intentioned solution to the inapplicability of standardized assessment tools for some populations, this practice invalidates the scoring of the test and makes the results difficult to interpret and to apply.

While modifying or adapting standardized measures is therefore not recommended due to the lack of normative criteria or existing research to guide the scoring and interpretation of the adapted measure (Hedge & Maul, 2006; Kohnert, 2008), this approach may nevertheless provide useful information in certain assessment situations that do not include the evaluation of performance for purposes of eligibility for service, where standardized test scores are often required. Knowledge of local language and cultural practices may be used when evaluating children's performance on standardized tests, even when the prescribed procedures are applied. For example, some clinicians track the performance of children on their caseload on test items that are perceived to be

biased and compare their responses to those of children without identified speech and language disorders from the same population base. A clinician knowledgeable about dialect issues may derive a normative score for the child's performance based on the prescribed scoring procedures and then outline in their report any clinical observations that might explain and contextualize the interpretation of that score with respect to the communication standards used in the community. This would require an in-depth understanding of the cultural norms, values, and practices underlying dialect use in a particular community.

A second reportedly common approach to circumvent the difficulties experienced with many standardized measures for use with Aboriginal children is to administer only certain subtests of a more comprehensive test tool, or to administer a series of subtests designed for assessing various sub-domains of communication from a variety of standardized tests rather than a single entire test battery (Peltier, 2011). Although not without potential sources of bias, certain tests and subtests have been recognized through personal experience as being relatively more appropriate for use with Aboriginal children than others. Peltier (personal communication, February 12, 2014) emphasized the importance of interpreting test results in view of the local community dialect as well as aspects of the child's Aboriginal worldview. As an example, Peltier points out that test items that ask a student to compare and contrast vocabulary items typically show that the First Nations students with whom she works are better at explaining similarities rather than differences between concepts. In light of this, Peltier might consider the Relational Vocabulary Subtest of the *Test of Language Development-Primary-fourth edition (TOLD: P-4)* (Newcomer & Hammill, 2008) a preferred task since it asks for how two stimulus items are alike rather than different. Peltier also mentions the utility of the Expressive Vocabulary and Word Definitions subtests of the *CELF-4* (Semel, Wiig & Secord, 2003) and the *TOLD: P-4* Oral Vocabulary subtest in revealing insights into First Nations students' world views in communities where she has worked. She notes in particular that First Nations students with whom she has worked often do not perform well on pragmatic profiles such as those contained in the *CELF-4*, the *Pragmatic Language Skills Inventory* (Gilliam & Miller, 2006), or the *Social Language Development Test* (Bowers, Huisingh, & LoGiudice, 2008) due to differences in discourse organization and cultural norms surrounding communication and social interaction in those First Nations communities.

A potential solution to the problem of normative samples of standardized tests not including Aboriginal children is to develop local norms to be applied in scoring test performance. The general process and procedures for the development of local norms are described by Brassard and Boehm (2007) and include: 1) the gathering of an appropriate team for the task at hand, 2) the determination of which test(s) will be normed, 3) an informed consensus on the items of the test to be modified and the acceptable responses to all test items in light of local considerations, 4) pilot testing to assess the validity of the acceptable responses, 5) the collection of demographic and normative data related to the respondents and their communities, and 6) the maintaining of detailed records regarding the effectiveness of the local norms in discriminating between children in need/not in need of service, as well as the outcomes of intervention provided to eligible children.

While the development of local norms for a particular test is a potentially viable solution to dealing with issues of bias in standardized assessment, a relatively large sample of children is required in order that the norms might be considered valid. Brassard and Boehm (2007) suggest that a minimum of 100 children per age level is required to develop local norms that can be considered to be stable. Achieving this sample size may not be feasible for most clinicians working on their own in small Aboriginal communities, where there may not be sufficient numbers of children to meet these stringent requirements. Combining information across communities may be an acceptable solution if it is determined that children in the communities are equivalent in their language use. This would need to be decided through extensive consultation, collaboration, and research with community members and professionals in order to ensure reliable results. At the least, the development of local norms is a lengthy and time consuming process that has limited geographical applicability. The resulting norms may be applicable to only a small group of children and may therefore not represent the most desirable solution.

Translating existing tests into the language(s) used by the community is another option potentially open to the S-LP. It must be recognized, however, that the direct translation of an existing test into another language does not take into account the linguistic properties and developmental sequence of the target language and as such is not appropriate to assess the child's home language proficiency (Kohnert, 2008). The simple act of testing a child using their home language does not in and of itself ensure that testing approaches, tasks, and content are unbiased. The vocabulary and sentence structures contained in English tests may not be applicable to the child's home language, and translated test items may vary in meaning and difficulty

from those contained in the original test. The direct translation of tests also has the potential to contain items that are culturally biased, in spite of these being presented to the child in their home language. Finally, since the administration of the test would have changed, application of the existing norms would not be appropriate (Hedge & Maul, 2006). Local norms could be collected, but the difficulties associated with the collection and development of local norms to the translated test would be equivalent to those previously described, making this approach potentially unsuitable and ineffective in dealing with the inherent problems of test bias.

A better approach, although complex, labor intensive, and demanding as well, would be to develop an original test, which is linguistically and developmentally appropriate for the language of the community. Normative data for the test would need to be collected and used to compare the child's performance to community age-level expectations related to language content, form, and use. An example of this approach is the bilingual Inuktitut and English language screening tool developed through a partnership between the Qikiqtani School Operations of Nunavut and researchers at Dalhousie University, as described by Dench, Cleave, Tagak, and Beddard (2011).

In light of all of the issues described above, the ultimate role of standardized testing in the assessment and diagnosis of potential language difficulties in Aboriginal children remains an unresolved question. The degree to which specific tests might accurately reflect the communication abilities of children who have not been represented in the normative population of a test, the inherent biases contained in the content of many commonly-used standardized assessment measures in speech-language pathology, and the impact of such considerations on the evaluation and interpretation of communicative performance of minority culture children as a whole and of Aboriginal children in particular should continue to prompt substantial discussion and deliberation in the field of speech-language pathology.

Published Questionnaires and Rating Scales. Published questionnaires and rating scales are often used to collect case history information and/or perceptions of a child's development, behaviors, abilities, and levels of functioning in various domains from individuals familiar with the child; including family members, day care providers and educational professionals (Hedge & Pomaville, 2013; Paul & Norbury, 2011). The information obtained from these individuals has been found to be reliable, informative, and generally well correlated with clinician-measured data (Boudreau, 2005; Dale, 1991; Hedge & Pomaville, 2013). Rating scales and questionnaires that have been reported as being used by S-LPs who work with Canadian Aboriginal children in *Healthy Babies Healthy Children*, Head Start, and neonatal hearing screening programs include the *Nipissing District Developmental Screen* (2000), *the Ages and Stages Questionnaire-3* (Squires & Bricker, 2009), the *Denver Developmental Screening Test (DDST-II)* (Frankenburg & Dobbs, 1992), and the *Early Development Instrument (EDI)* (Offord & Janus, 2007). Nevertheless, the reliability and validity of these and other screening tools and developmental questionnaires for Aboriginal children remain to be determined. Most existing measures have been developed for use with majority culture families and many of them contain normative samples, making them susceptible to similar sources of bias in their application and scoring as those previously discussed for standardized tests, even when used for screening purposes (Baydala et al., 2009; Choi & Pak, 2005). For example, child development questionnaires often contain items related to child care arrangements such as sleeping and feeding, as well as communication and play development. These items tend to be based on North American assumptions about how children should be raised and expectations of what they should be able to do at certain ages. Such skills and constructs may not translate well into other cultures, and may be particularly inappropriate for Aboriginal children. For example, a common question on such questionnaires is whether or not the child sleeps in his/her own bed. The underlying purpose of the question is to establish aspects of a child's independence. For many Aboriginal children, however, this is an inappropriate and culturally loaded construct leading to the potential for misinterpretation of the child's living environment and level of functioning. Again, clinicians working with Aboriginal children must be aware of the language socialization and parenting practices, the lived reality and the developmental expectations of the children they serve and should carefully examine questionnaires and rating scales for elements containing potential bias in light of this information.

Since many questionnaires and rating scales are not scored using normative information, these may be more easily modifiable for use in a specific Aboriginal context or community. Such adaptations nevertheless require knowledge, familiarity, and insight into home and community ways of raising and interacting with children. Input from parents, interpreters, and cultural informants is critical to the accurate interpretation of information obtained from questionnaires and rating scales. Without such input, information obtained from these sources may be more accurately interpreted as a reflection of a

child's or family's degree of acculturation rather than as a measure of performance, skill, or level of functioning. Taking an ethnographic approach to the judicious selection of questions that might be relevant to the specific situation and context of the child as suggested by Crago and Cole (1991) may provide more insightful information than the administration of questions contained in a pre-conceived questionnaire.

Child-centered Assessment Approaches

'Child-specific', 'child-centered', 'non-traditional', or 'informal' assessment approaches involve procedures that are specifically tailored to examine the potential strengths, weaknesses, and needs of an individual child (Hedge & Maul, 2006). Such approaches focus on determining the child's unique communicative abilities and challenges. They are not usually intended to be used to compare the child's performance to normative data or to specified mastery criteria, but rather to assist in making informed clinical decisions by interpreting the data in light of developmental expectations. For example, parental, family, and teacher interviews may be used to obtain information regarding the child's cultural and linguistic background as well as the child's skills in speech and language production and comprehension in diverse contexts. Using selected stimulus items that are familiar to the child and are culturally adapted, observing the child in a variety of communicative contexts and obtaining representative language samples provides information on how the child achieves various communicative outcomes. These strategies may afford the child greater opportunities to display acquired language abilities and to demonstrate success.

While child-centered approaches to assessment are often perceived as being less open to the types of assessment bias described above, they nevertheless rely on an in-depth understanding and correct interpretation of verbal and non-verbal communicative behaviors and learning styles demonstrated by children in various contexts. As such, they are equally open to biased interpretation when used by a clinician unfamiliar with Aboriginal communities and their communicative values and practices. Practitioners wanting to utilize child-centered approaches to language assessment with Aboriginal children must be familiar with the language socialization practices, the communicative norms and values, and the learning styles predominant in the cultural community of the individual child. Various child-centered approaches to language assessment are described in the sections below. A general summary of potential advantages and disadvantages of the application of child-centered approaches to the assessment of Aboriginal children is provided in Appendix B.

Criterion Referenced Assessment. Hegde and Maul (2006) refer to criterion-referenced assessment as a middle ground between standardized testing and child-specific measures of language performance. Criterion referenced assessment refers to the practice of interpreting a child's performance in relation to a performance standard rather than in relation to a set of specified test norms. Essentially, this approach attempts to determine at what level the child is performing and whether or not this level is developmentally appropriate for the child (Hedge & Maul, 2006). For example, a clinician may examine the child's use of specifically identified skills and compare these to a pre-set mastery criterion in order to determine whether these are adequate for functional use in an environment such as a daycare or classroom. Skills that do not meet the level of mastery predetermined by the clinician are then targeted for intervention.

There is some existing evidence that criterion referenced approaches are appropriate for and have been used successfully with bilingual children (Hedge & Maul, 2006), however no published evidence related to the use of this approach with Aboriginal children was located in the literature. Nevertheless, the approach has interesting implications for the unbiased assessment of Aboriginal children. The approach requires that multiple opportunities be provided for the child to produce the desired behavior in order that an accurate response level can be calculated. This level of performance can then be used as a baseline in determining later treatment progress. Furthermore, the clinician may select stimulus items that are of particular relevance to the child's cultural background, thus possibly enhancing the child's potential to perform well on the task. In this approach, the clinician may adopt a performance standard based on the communication styles and practices of the local community, thus avoiding one of the major pitfalls of the standardized testing approach. Criterion-referenced assessment also allows for an in-depth examination of specific language skills, which most standardized tests are not intended to do.

On the other hand, the criterion-referenced approach often requires a significant amount of preparation and may involve extensive time for observation and analysis. An understanding of the developmental progression of language acquisition of children in the target community would be required in order to establish an appropriate mastery level for a targeted language skill and determine whether or not the child's performance is at an age-

appropriate level. This in turn may require the application of developmental norms, a practice that entails some of the same potential dangers as the application of standardized test norms as described above when used with Aboriginal children. Clinicians would need to be well versed in the linguistic and cultural background of the community in order to apply this approach without bias. The determination of an acceptable mastery criterion level may also pose challenges to the effective implementation of criterion-referenced assessment practices. Tasks must be carefully selected to ensure they are appropriate, relevant, and applicable for use with the Aboriginal child and to ensure that any potential for cultural conflicts in learning strategies, patterns, and preferences are eliminated.

Language Sampling is often used in conjunction with other assessment procedures as one type of criterion referenced approach, but may also be used independently as a means to examine an individual's communicative abilities as a function of context, interlocutor, or specific communicative skills in a relatively naturalistic environment (Hegde & Maul, 2006; Hegde & Pomaville, 2013; Owens, 2010; Paul & Norbury, 2011). In most cases, the sample is transcribed and analyzed at either a micro- or macro-structural level. Microstructure analyses include measures of expressive language including vocabulary, semantic relationships, syntactic structure, morphology, pragmatics, speech sound production, and fluency (Paul & Norbury, 2011). Typical language measures derived from language sampling techniques include mean length of utterance (MLU), type-token ratios (TTR), and frequency of various sentence types, as well as the percentage of correct productions for various grammatical morphemes in obligatory contexts or various phonemes (Hegde & Maul, 2006; Owens, 2010; Paul & Norbury, 2011). These can then be compared to existing findings regarding typical development in order to make an informed judgment regarding the presence of a language disorder. In some cases, a criterion level of performance falling 1.5 standard deviations below the mean for a specific language measure can be applied in diagnosing a language disorder and justifying eligibility for service (Hegde & Maul, 2006). The Systematic Analysis of Language Transcripts (SALT) system (Miller, Andriacchi, & Nockerts, 2011) can be used with a transcribed language sample to automatically compute analyses of lexical, syntactic, semantic, pragmatic, rate, fluency, and error categories that can be compared to the system's language sample reference databases for developmental comparisons.

While language sampling appears to be a relatively less biased and more child-centered approach to the assessment of language abilities, it is nevertheless not immune to criticisms of potential bias in several key areas. The context used to elicit the sample may contain situational or content bias if it is unfamiliar to the child or involves communicative tasks, culturally biased materials, or culturally inappropriate communicative partners. MLU and TTR appear to be relatively objective measures of expressive language, yet the norms for these indices have been derived based primarily on majority culture English speaking children from middle class socio-economic backgrounds whose communication levels may not be representative of all children (Paradis et al., 2011; Roseberry-McKibbin, 2007). Few norms for these measures exist for languages other than English, and the direct application of English norms to children speaking other languages or dialects is inappropriate. Dialect differences can also come into play in the analysis of speech production and morphological correctness, and cultural differences in discourse organization and pragmatics may continue to predispose the culturally-uninformed clinician towards a deficit interpretation of an individual child's performance.

On the other hand, the collection of local norms related to MLU and TTR for various age groups may be a realistic and feasible solution to enhancing the applicability of the language sampling approach for Aboriginal children. Collecting examples of the systematic characteristics of morphological, semantic, and phonological productions and language use related to particular Aboriginal community dialects, in a similar way as has been done for African American English for example, would potentially contribute to the unbiased interpretation of language samples obtained from Aboriginal children. The SALT system (Miller, Andriacchi, & Nockerts, 2011) has the capacity to develop a comparison database using locally collected language samples which could provide a very useful tool against which the individual performance of a child from that community might be compared in a relatively unbiased manner.

Narratives are a form of discourse that are often included in language sampling analyses, thus also falling under the criterion referenced perspective on language assessment. Various approaches to micro- and macro-structural analysis are then typically used to examine and evaluate the linguistic complexity and discourse structure of children's stories. In terms of macrostructure, a considerable body of research has documented the cultural variation that exists in the ways in which narratives are constructed and organized, and consequently in how these narratives should be viewed and analyzed (Berman & Slobin, 1994; Gutierrez-Clennen & Quinn, 1993; Heath, 1986; Kay-

Raining Bird & Vetter, 1994; Michaels, 1981; McCabe & Bliss, 2004-2005; Peltier, this volume; Peña et al., 2006; Pesco, 1994; Roseberry-McKibbin, 2007). Some bilingual children and Aboriginal children in particular may arrive at school with limited ability to formulate an episodically structured narrative and little familiarity with the components of narratives valued by educators in mainstream classrooms (Khan & Paddick, this volume; Peltier, this volume; Peña et al., 2006). In particular, researchers including Cronin (1982), Kay-Raining Bird and Vetter (1994) and Pesco (1994), have described how attempting to apply traditional story grammar and high point analysis approaches to narratives produced by school-aged Aboriginal children in various United States and Canadian contexts provides only mixed results. They argue that the traditional story grammar analysis may not be the most appropriate model against which an Aboriginal child's narrative may be most usefully compared as it does not allow for the proper recognition of the cultural and linguistic richness, traditional narrative structures, and community-valued topics that define good narratives from an Aboriginal perspective. In her article in this volume, Peltier describes her research examining Aboriginal storytelling and demonstrates how alternative approaches and perspectives that are grounded in an Aboriginal worldview might provide greater insights into the narrative abilities of Aboriginal children.

Dynamic Assessment. Dynamic assessment is also considered to fall into the category of child-centered assessment approaches. Dynamic assessment examines the child's use of learning strategies, responsiveness to instruction, modifiability, and ability to generalize newly learned skills to novel situations rather than measuring discrete language abilities (Miller, Gillam & Peña, 2001; Gillam, Peña & Miller, 1999; Owens, 2010; Roseberry-McKibbon, 2007). The child's performance on a series of tasks presented in a test-teach-retest format is compared to that of typically developing peers who have the same linguistic and cultural background. Performance is evaluated on the basis of learning speed, learning difficulty, the child's need for structure, scaffolding and individual attention, and the need for modification of instructional strategies as compared to their peers. Dynamic assessment is considered to present a process rather than a static, product level approach to the interpretation of performance on a specific set of tasks which are chosen with reference to a given child's specific needs. Since the purpose of dynamic assessment is to examine an individual child's learning potential, it has been described as representing a less biased solution to the concerns associated with standardized tests in assessing children's language development and ability.

Dynamic assessment procedures have been proposed to be particularly applicable in differentiating a language disorder and a language difference with BCLD children in general (Roseberry-McKibbin, 2007; Thomas-Presswood & Presswood, 2008), and there is evidence for their effective use with Aboriginal children. Ukrainetz, Harpell, Walsh and Coyle (2000) used dynamic assessment methods to assess the language learning abilities of two groups of Native American children, the preferred term used in the United States to refer to these children. Kramer, Mallett, Schneider and Hayward (2009) investigated the ability of the dynamic assessment and intervention tool developed by Miller, Gillam and Peña (2001) to discriminate between a group of Canadian First Nations children with normal language abilities and those with possible language learning difficulties as determined by teacher report. Both studies suggest that dynamic assessment may represent a promising approach to conducting culturally valid and less biased assessments of Aboriginal children and for reliably identifying children with potential language disorders.

Holistic Approaches to Assessing Aboriginal Children's Language: Curriculum-, Portfolio-, and Routines-based Assessments

A number of less common assessment approaches including curriculum-based, portfolio-based, and routines-based methods have been shown to be effective alternatives in assessing the language of BCLD children and may therefore have promising applications for the assessment of Aboriginal children (Hegde & Maul, 2006; Hegde & Pomaville, 2013; Roseberry-McKibbin, 2007; Losardo & Syverson, 2011; McWilliam, 2010; Paul & Norbury, 2011). As these are relatively new to the field of speech-language pathology, they require some brief elaboration.

In *curriculum-based assessment*, the supports and degree of scaffolding required by the child to attain mastery of the language demands of the curriculum are determined to identify gaps between the child's linguistic abilities and competence and those required for successful performance in a particular linguistic context (Hegde & Maul, 2006; Nelson & Van Meter, 2002; Norris & Hoffman, 1993). Curriculum-based assessment may involve identifying specific vocabulary and language elements of the curriculum and determining the child's typical responses to these linguistic demands. This approach may include elements of dynamic and criterion-based assessment approaches in determining the child's responsivity to adult dialogue and ability to process information within the context of the school curriculum (Paul & Norbury, 2011). Classroom observations to identify

the student's learning strategies, participation, and processing abilities form the basis of this approach. Areas in which the child is found to be experiencing difficulty are identified, and strategies, scaffolds, and supports to enhance language processing and subsequent learning that would permit the child to function more effectively in the specified language environment are elaborated as the focus of intervention (Nelson & Van Meter, 2002; Norris & Hoffman, 1993; Paul & Norbury, 2011). Advantages of this approach that might be particularly applicable for use with Aboriginal children include the direct link between assessment information and the setting of intervention goals, and the applicability of the approach to children representing diverse language, cultural, and developmental profiles. Since the strategies, curriculum modifications, and desired outcomes are based on the performance of the individual child, they are less open to the intrusion of various sources of cultural bias. It must nevertheless be determined in interpreting the results that the curriculum presented in the classroom and the strategies used in the instruction of the curriculum are appropriate for the child and are themselves free of bias (Rhodes, Ochoa & Ortiz, 2005; Sparks, 2000).

In *portfolio-based assessment*, diverse examples of products and work samples produced by the child are collected and are combined with observations and descriptions of behavior and performance in various linguistic contexts (Losardo & Syverson, 2011; Paul & Norbury, 2011; Roseberry-McKibbin, 2007). This combined information is then used to determine the child's performance levels and to develop a profile of individual areas of strength and weakness. Information collected may consist of any combination of work produced in class, teacher-made tests, criterion referenced testing, and standardized testing. Evaluation of the portfolio is conducted using clear criteria that reflect the demands of the curriculum, the child's individual goals and objectives, and the child's progress with identified learning tasks. Evaluation may be either numeric (through use of a rating scale), or may take a more qualitative, narrative format. The approach typically relies on a collaborative review of the combined portfolio information by professionals, parents, and the children themselves when appropriate (Losardo & Syverson, 2011; Roseberry-McKibbin, 2007). Advantages of the portfolio approach for Aboriginal children include the direct links to curriculum-based classroom skills and abilities, the involvement and participation of the child and the family, the opportunities for collaboration among professionals, and the flexibility of the approach to address a variety of contexts and language environments. Since much of the gathered data includes samples of work produced by the child, portfolio assessment can be more sensitive to subtle changes and progress that occur over time than more traditional assessment approaches. The approach is nevertheless reliant on the extent to which the collected materials are representative of the child's abilities and actual level of performance.

Routines-based assessment relies on an in-depth understanding of the social environment of the family and of family functioning, every day routines, activities and experiences, and family-based priorities in the identification of the skills and supports a child might require to function effectively in daily life (Bernheimer & Weisner, 2007; McWilliam, 2010; Peterson, Luze, Eshbuagh, Jeon, & Kantz, 2007). The approach is based on the premise that children learn best through experiences and interactions based on daily routines in familiar contexts and with familiar people. Individual family strengths, needs, and interests are identified through a detailed semi-structured interview and are used as supports and resources in assisting family members to enhance learning opportunities for children based on existing activities and learning opportunities (Campbell, Milbourne & Wilcox, 2008; Crais, 2011; McWilliam, 2010). The focus of intervention is to support family members in identifying and adapting naturally occurring everyday activities to support their children's language, learning, and overall development. The emphasis on family perspectives, the understandings of their involvement in intervention, and the ongoing communication and collaboration among all participants suggests that there would be less room for cultural biases to be introduced by the collaborating professionals. In addition, this approach may provide important insights into Aboriginal family and community-based practices regarding language socialization and the roles of children as communicators. This family-centered approach is particularly useful with young children and their families, however adopting a similar perspective for use with older children has similar advantages. On the other hand, the potential for the S-LP to continue to apply their own cultural lens in observing and interpreting may still result in the misinterpretation of the child's behavior and performance.

Holistic approaches are reliant to a greater or lesser extent on transdisciplinary perspectives in identifying the strengths, needs, and weaknesses to be addressed through intervention that may enhance functional outcomes for the child and the family (Linder, 2008; McWilliam, 2010; Myers, McBride & Petersen, 1996). Transdisciplinary approaches involve regular communication and collaboration among a range of professionals and family members, with professionals providing consultation to the family and to

each other in supporting the goals and priorities identified for the child and family, and their associated decisions to arrive at desired outcomes (Losardo & Syverson, 2011; McWilliam, 2010). Advantages of transdisciplinary perspectives for Aboriginal children in particular include the coherence and contextualization of the intervention plan, the active role of the family in decision making and in implementing these decisions, the holistic and individualized portrait of the child, and the potential for enhanced communication and developmental outcomes through collaboration. In addition to the advantages listed in Appendix B, such integrated approaches preclude the potential biases and viewpoints of any one professional to dominate assessment findings and intervention decisions, and empower the family to take a leading role in decision making related to their child.

Suggestions to Promote the Development of Best Practices in Assessing Canadian Aboriginal Children's Language

In light of the information presented above, a number of suggestions for promoting a model of best practice in the unbiased assessment of Aboriginal children may be put forward. This model would require confirmation and approval from experienced S-LPs currently providing service to Aboriginal children in the diverse social, linguistic, and geographic contexts in which they live. Considerations in the development of such a model include an elaboration of the necessary steps in the planning and conducting of an assessment, the ways in which existing tests and approaches might be successfully adapted or modified to better examine and represent the communicative abilities of Aboriginal children, the ways in which the obtained assessment information might best be presented, the involvement of family members and local personnel in the assessment process, and the need for additional evidence to enhance communication assessment practices currently being used with these children.

In planning the assessment, the S-LP should consider its ultimate purpose, the kind(s) of information that is sought, and how this information will be used. These considerations will have an important impact on decisions regarding the approach to assessment to be adopted and the type of information to be collected. An awareness of the potential sources of bias that might be implicit in the selected approach, along with possible steps toward avoiding or minimizing these biases, are likely to enhance the assessment performance of the Aboriginal child. In particular, no single measure should be used in isolation in assessing children's communication abilities, and S-LPs should be particularly wary of using standardized tests as stand-alone indicators of communicative competence. Information obtained from these tests should be combined with other sources of information, particularly from child-centered approaches, in order to contextualize the obtained information.

If test items or procedures associated with any standardized test are adapted in order to obtain more culturally valid information, it is recommended that the test be first administered following the procedures stipulated by the test manual. This allows conclusions to be drawn regarding the child's performance on the actual and the adapted tests that can be extremely useful in developing appropriate and individually focused goals and objectives, as well as in understanding specific aspects of community variation in language use from the expected test responses. S-LPs are advised to use systematic procedures in collecting such data in order to allow them to interpret these in an unbiased manner and to share this information in order to allow commonalities across communities to be drawn. Changes in the scoring of test items reflective of dialect or cultural differences should be explicitly outlined in the assessment report, and both the standard and the adapted scores should be reported for purposes of test validity. Attempts to collect local normative information, to adapt an existing assessment tool for use in a local community, or to create a new assessment tool would require extensive collaboration with community members and input from other S-LPs who are knowledgeable about working with Aboriginal children. These may nevertheless never be directly applicable to other Aboriginal communities.

Community, family, and developmental information should be taken into account in planning the assessment and in interpreting the assessment data collected. These considerations permit a holistic and contextualized perspective on the child's abilities and need to be elaborated. Family factors to consider include the language(s) used in the community, the exposure of the family to these languages, the family's language use, and, if bilingual or multilingual, relative language strengths, socio-economic status, and academic histories. The child's educational history and history of school attendance, the manner in which the curriculum is presented to the child, the degree of correspondence with the child's individual learning strengths and preferences, the child's interests, and the child's communication abilities across settings and interlocutors as well as developmental information that is informed by the mores and expectations regarding childrearing and language socialization in the community

and the family should form part of this basic contextual information. In order to integrate these variables into their current assessment practices, S-LPs working with Aboriginal children should be encouraged to learn about the communities in which they are working with respect to the local community structure, context, history, previous contact with medical personnel, and local and regional access to services. Such knowledge and awareness increases the professional's ability to relate to local issues and to provide the community with the best possible services. The wealth and breadth of knowledge that can be gained through collaboration and relationship-building with Aboriginal communities are well described by Zeidler (2011).

Involving local personnel as part of the assessment process is likely to contribute to a more accurate interpretation of the collected information. This is particularly true for children who speak a language in which the S-LP is not fluent. On the other hand, simply asking local personnel to communicate the assessment questions in the student's first language is no guarantee of an unbiased assessment. Unexamined assessment practices and their inherent biases can be easily replicated, even when questions are presented in the first language of the child. Providing local personnel with training in the tasks they are being asked to assist with, collecting their insights and interpretations, and using their knowledge and experience as a rich source of information can enhance the S-LP's understanding of community dialect and language use that will serve them well in interpreting children's language performance. The S-LP's awareness of both the verbal and non-verbal communication patterns and dialect norms in operation in any community may be greatly enhanced through the direct involvement of local personnel. Questions to be considered in involving local personnel in assessment situations include the types of training that would be required in order for local community members to effectively assist and inform the language assessment process; the ways in which this training might be recognized; the incorporation of Aboriginal perspectives into existing S-LP and Communication Disorders Assistant (CDA) programs to respond more adequately to community demands; and the potential development of CDA programs specifically designed for the training of Aboriginal personnel. Ayukawa (this volume) presents a highly successful training model for Inuit hearing professionals that has been used effectively over many years in Nunavik. Similar methods and perspectives might be used to inform the training of local Aboriginal supportive personnel in speech-language pathology.

The importance of considering the whole child, their activities, environments, supports, and participation in a thorough assessment of language abilities is an underlying principle in the development of recommended assessment approaches for Aboriginal children. The International Classification of Functioning, Disability and Health of the World Health Organization (WHO, 2001) provides an existing framework and perspective that may have particular relevance for the assessment of Aboriginal children. This perspective has had a profound impact on approaches and practices related to assessment due to its shift in focus away from medically-based factors and onto the multitude of variables in the physical and social environment of the individual that might represent barriers or facilitators to their successful participation in everyday life (Gal, Schreur, & Engel-Yeger, 2010; WHO, 2001. This shift in focus allows individuals to be seen as acting within physical and social contexts that are themselves open to intervention and remediation. The philosophy stands in sharp contrast to the traditional, medical perspective of disability being inherent to the individual, and the associated belief that appropriate intervention should focus primarily on the remediation of an individual's presumed deficiencies.

While translations of the WHO perspective into clinically applicable approaches to S-LP assessment and intervention have been relatively limited, a number of researchers including McLeod (2006), McLeod and Threats (2008), Thomas-Stonell, Oddson, Robertson, & Rosenbaum (2009), and Washington (2007) have attempted to apply this comprehensive perspective to the assessment of children with communication disorders. In particular, the work of Thomas-Stonell et al. (2009) in developing the FOCUS (Focus on the Outcomes of Communication Under Six), an assessment tool for preschool children, merits attention as it provides an attempt to measure change using an outcome measure whose goal is to capture communication and participation abilities before and after speech and language intervention (Thomas-Stonell et al. 2009; Thomas-Stonell, Oddson, Robertson, & Rosenbaum, 2010). The ICF approach still requires substantial additional translation in order to become a workable framework for use with children with communication disorders in general and for BCLD and Aboriginal children in particular, however the inherent perspective shows great promise in its ability to provide a holistic and unbiased view of an individual's communication abilities that is contextualized within their everyday environments upon which functional assessment and intervention goals and strategies might be based.

Additional evidence to confirm or dispute the applicability and usefulness of existing assessment

approaches and procedures must be collected in order to arrive at more evidence-based decisions regarding administration principles and procedures deemed to be appropriate to the assessment of First Nations, Métis, or Inuit children who have been referred for potential language difficulties. At the present time, decisions related to the appropriateness of various approaches to language assessment for Aboriginal children cannot be based on the strongest forms of research evidence, as very little evidence was located in the existing literature. Collecting such information would entail the documentation and sharing of approaches and procedures that have been found to be effective in determining whether or not an Aboriginal child presents with a language disorder. Both researchers and clinicians working with these children should be involved in gathering the necessary evidence base, with particular emphasis placed on the knowledge and experiences of the few Aboriginal S-LPs practicing in Canada.

The suggestions listed above as potential areas of action for the development of best practices in the language assessment of Aboriginal children stem primarily from extrapolations from the literature, interactions with experienced clinicians, and individual personal experiences. Clearly a great deal of work remains to be done to address the unresolved questions associated with the provision of culturally appropriate S-LP assessments as well other rehabilitation services for Canadian Aboriginal children residing in both urban and remote communities. Advancing the field and arriving at a consensus on best practices will require careful consideration and informed collaborations between multiple stakeholders including local community members and local Aboriginal and non-Aboriginal rehabilitation, educational, and psychological professionals. Additional data regarding the prevalence and etiology of communication disorders in Aboriginal communities must be collected, as well as additional evidence to support the need for modifications and adaptations to current assessment practices in S-LP. A discipline-wide forum of clinicians and researchers who are experienced in working with Aboriginal communities would provide an important first step in arriving at informed decisions regarding the most promising practices in S-LP to be adopted or adapted for use in the language assessment of Aboriginal children. The development of such culturally informed perspectives and approaches has the potential to contribute to improved assessment, intervention, language, and overall educational outcomes for Aboriginal children across Canada.

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End Notes

[1]Throughout this paper, the term 'Aboriginal' will be used to refer inclusively to First Nations, Métis, and Inuit people, unless otherwise specified.

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Appendix A. Advantages and Disadvantages of Standardized Testing for Aboriginal Children

Advantages of standardized testing for Aboriginal children

- perceived objectivity
- well-established normative properties
- ability to derive standard and age-equivalent scores and percentile ranks that can be used to compare an individual's performance to that of a proposed representative sample of peers contained in the normative sample
- high test-re-test reliability
- relative ease and convenience of administration as stimuli and instructions are pre-determined and are contained in the administration manual
- requires little time for preparation
- time required for scoring is usually not extensive
- many standardized tests can be scored automatically using purchased software
- demands on the clinician are relatively easy

Disadvantages of standardized testing for Aboriginal children

- use of the normative sample for Indigenous children who are rarely represented in the normative sample may lead to misdiagnosis
- open to extensive criticisms of potential cultural bias when used with children who are not represented in the normative sample
- findings may be irrelevant to the assessment of interactive behavior
- findings may not easily reflect a child's communicative competence during real-life interactions
- information obtained from standardized testing does not provide a complete or consistent picture of the child's communicative competence and/or linguistic skills across language modalities
- few opportunities for examining specific language structures
- testing situation may be unfamiliar
- task demands may be unfamiliar
- elicit little information about pragmatic competencies
- test directions may be relatively inflexible regarding repetition or time permitted to respond
- difficult to adapt test administration and scoring procedures as this invalidates the application of the test norms
- difficult to discriminate between language difference and language disorders due to rigid scoring practices that are insensitive to dialect and community language differences
- collected information may not translate well into the setting of relevant goals

Appendix B. Advantages and Disadvantages of Child-Centered Assessment Approaches for Aboriginal Children

Advantages of child-centered assessment approaches for Aboriginal children

- practical
- functional
- flexible
- collaborative
- easily adapted to focus on an individual child
- provides information for setting relevant goals
- may involve families and other professionals
- focus is on the familiar, the known
- reduces barriers
- possible to link to standardized assessment data
- provides opportunities for coaching, modeling, scaffolding
- provides opportunities for professional development
- provides opportunities for skill development for family members
- allows assessment and intervention to be more closely aligned
- can be adapted to incorporate dialect or bilingual considerations
- can use familiar contexts, communicative partners, tasks
- can incorporate Aboriginal content, values, dialect, stories
- may provide indicators of growth
- provides big picture/macro information
- provides qualitative information
- captures spontaneous language use
- provides multilayered information
- may see the unexpected
- may be adapted to individual learning styles
- may provide information on the role of context and how this affects performance
- may allow observations of small gains and successes for children whose progress is not easily measurable

Disadvantages of child-centered assessment approaches for Aboriginal children

- potential for bias is still present
- requires a skilled and knowledgeable clinician
- time for planning and analysis of the assessment is increased
- pressure for the clinician regarding clinical knowledge, cultural knowledge, family knowledge is increased
- may be costly in terms of time investment
- coordination of the assessment may be complicated
- determining the criteria for assessment may be difficult as there is no fixed measurement
- assessment fatigue may be a problem
- the purpose of the assessment and the specific parameters to be assessed must be clearly articulated in advance to avoid loss of focus
- information may be difficult to summarize
- translation of information to report writing may not be easy
- transitions to new professionals may be complicated: what will other people get from the assessment information?
- information obtained may not be readily translated into bureaucratic decision making
- family members may require training in order to be appropriately involved

Assessing Anishinaabe Children's Narratives: An Ethnographic Exploration of Elders' Perspectives

Évaluation des récits d'enfants anishinaabek : une exploration ethnographique de points de vue d'anciens

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KEY WORDS

EDUCATION
NARRATIVES
INDIGENOUS RESEARCH METHODOLOGY
CHILDREN'S STORIES
ELDERS
STORYTELLING CIRCLES
FIRST NATIONS ORAL TRADITION
LANGUAGE ASSESSMENT
ABORIGINAL ENGLISH DIALECTS

Abstract

This paper reports on an ethnographic research project conducted to explore the narrative skills of a group of eight Anishinaabe children. An emically-derived methodology was developed to examine narrative skills and the results were compared to those obtained using a scoring system developed for narrative analyses with majority culture English speaking children. The research illustrates that narrative analyses derived from a Western based perspectives, such as the Narrative Scoring Scheme (NSS) from the Systematic Analysis of Language Transcripts (SALT) software, is not always congruent with a narrative analysis based on the Anishinaabe perspective that reveals culturally relevant preferences for components of narratives based on the perceptions of Elders who value Aboriginal orality. The application of a Western based narrative analysis tool placed a different emphasis on what was valued as a 'good' narrative and these evaluations did not consistently reflect Anishinaabe orality values and perspectives. The research addresses culturally appropriate practices for eliciting and assessing the narrative performance of Anishinaabe children and provides an opportunity to understand the research participants in their own context while exploring culturally-specific meanings behind the data.

Abrégé

Cette communication fait rapport d'un projet de recherche en ethnographie qui voulait explorer les compétences narratives d'un groupe de huit enfants Anishinaabe. Une méthodologie émiquement dérivée fut développée pour examiner les compétences narratives et les résultats furent comparés à ceux qu'on avait obtenus à l'aide d'un système de cote élaboré pour des analyses narratives auprès d'enfants de culture anglophone majoritaire. La recherche illustre que les analyses narratives dérivées depuis des points de vue à base occidentale, comme le Narrative Scoring Scheme (NSS) du logiciel Systematic Analysis of Language Transcripts (SALT), ne sont pas toujours congruentes avec une analyse narrative basée sur le point de vue Anishinaabe, qui révèle des préférences culturellement pertinentes pour des composantes de récits basées sur les perceptions d'anciens qui apprécient l'oralité autochtone. L'application d'un outil d'analyse narrative à base occidentale a mis un accent différent sur ce qui était apprécié comme un 'bon' récit, et ces évaluations n'ont pas reflété de façon uniforme les valeurs et les points de vue d'oralité Anishinaabe. La recherche touche des pratiques culturellement appropriées permettant d'éliciter et d'évaluer la performance narrative d'enfants Anishinaabe et donne l'occasion de comprendre les participants à la recherche dans leur propre contexte tout en explorant des sens culturellement spécifiques derrière les données.

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Narrative Skills, Academic Success, and Aboriginal Narrative Style

Narrative skills are important for social and academic success (Bliss & McCabe, 2008; Johnston, 2007). Children who do not develop narrative abilities at a level typical for their age may experience compromised relationships with peers, adults, and educators (Bliss & McCabe, 2008). Johnston (2007) states that the paramount goal of the primary grades is the acquisition of literacy and that oral language development, including narrative skills, are foundational to the development of literacy during these early years. Oral storytelling is therefore a relevant area to investigate since reading, writing, and spelling rely on an oral language base.

Furthermore, orality, in the form of story telling, has an extensive history in Aboriginal communities and is a life skill that is valued by the community, as evidenced by the traditional practice of encouraging oral history and oral language. A large number of Native languages were spoken in Canada prior to European contact. None of these were expressed in written form until the beginning of the 19th century when Roman or syllabic writing systems were adopted (Burnaby, 1982; Sugarhead, 1996). Instead, cultural knowledge and traditions of individual communities were historically handed down using oral traditions and genres. The strong oral traditions of First Nations, and specifically Anishinaabe[1] communities, have not been adequately considered in terms of their potential for supporting children's academic success. By gathering information about the components and aspects of narratives produced by Aboriginal children, we can gain further insight into Aboriginal orality and how it differs from mainstream narrative models. This knowledge can guide educators in creating culturally sensitive and appropriate bridges between storytelling and literacy activities in the language arts curriculum. Oral storytelling may also be effectively used in teaching and learning by transmitting knowledge, worldview, and learning among Aboriginal people.

Challenges in Aboriginal Education

The strong oral traditions of First Nations, and specifically Anishinaabe communities, have not been adequately considered in terms of their potential for supporting children's academic success. The 2006 Canadian Census data regarding Aboriginal peoples from Statistics Canada showed lower educational attainment levels for Aboriginal peoples as compared to non-Aboriginal populations. More recently the Canadian Council on Learning (2007) highlighted the interconnectedness of literacy and the economic, social, and cultural life of an individual in *State of Learning in Canada: No time for complacency. Report on Learning in Canada 2007*. The report revealed that a healthy balance of spiritual, emotional, physical, and intellectual aspects of a person supports life-long learning. The document called for an acknowledgement of the informal and traditional knowledge that Aboriginal learners bring to the classroom. Research from Ball (2006; 2007; 2008) and Kanu (2002) related socioeconomic factors to social disadvantage and exclusion from full participation in school. They identified a mismatch between cognitive and learning experiences of Aboriginal students outside school and the academic content and processes of the formal school system. Chambers Erasmus (1989) has also described aspects of cultural mismatches in performance expectations that interfere with Aboriginal student success.

Patterns of language used by children vary within and across Aboriginal communities and some of these variations have recently been documented and elaborated as features of Aboriginal English dialects or First Nation English Dialects (FNEDs). These dialects are distinct from the form of English that is spoken by mainstream society and are legitimate, systematic, and rule-governed variations of the English language with different and distinct pronunciations, vocabulary, grammar, discourse, and pragmatic usages (Ball & Bernhardt, 2005; Ball & Bernhardt, 2008; Bernhardt, Ball & Deby, 2007; Heit & Blair, 1993). Aboriginal children who speak a FNED are at a disadvantage when their communication skills are formally assessed in school and challenges they face are often framed in a deficit perspective. Several authors (Ball & Bernhardt, 2005; Fadden & Lafrance, 2010; Heit & Blair, 1993; Peltier, 2009; Peltier, 2010a; Peltier, 2010b; Peltier, 2011; Sterzuk, 2008; Sterzuk, 2011) have advocated for a shift in how we perceive and respond to FNEDs to improve academic outcomes for Aboriginal children. Speech-language pathologists have expressed the need for research examining regional data to identify and define the speech and language characteristics of Aboriginal English Dialects. Anderson (2002), Friesen and Friesen (2005), Leavitt (1995, 1987), Nevins 2004, and Piquemal (2003), among others, have also identified the need for a curriculum that integrates elements of traditional and contemporary First Nations culture and validates Aboriginal languages, interaction patterns, and models of discourse as legitimate ways of knowing and learning by making them central to the curriculum. This approach would not only reduce racial tension (Ghosh 2002) and help Aboriginal students feel more comfortable in the classroom, but would also better meet the needs of tuition-paying Aboriginal students in provincial schools, creating a heightened sense of place or connection to

community/land and facilitate involvement of Elders and community members in the schools. In 2007, the Ontario Ministry of Education launched an *Ontario First Nation, Métis, and Inuit Policy Framework* aimed at developing educators' understanding of Aboriginal learning styles and curriculum approaches that support Aboriginal students' literacy and success. The Policy states that, "All students in Ontario will have knowledge and appreciation of contemporary and traditional First Nation, Métis, and Inuit traditions, cultures, and perspectives" (Ontario Ministry of Education, 2007, p. 7).

The Evaluation of Children's Narratives

Researchers in North America have identified narrative developmental sequences for non-Aboriginal populations from the perspective of Western traditions that utilize a variety of analytical models. Several foundational methods for evaluating narratives and their structure have been developed for evaluating children's narratives, including Labov's high point analysis and Stein and Glenn's (1979) story grammar analysis (Labov & Waletzky, 1967; Stein & Glenn, 1979). Labov's personal narrative structural analysis puts the emphasis on affective information and narrative organization around emotional 'high points' or crisis events. Stein and Glenn's story grammar structure model identifies narrative elements such as setting, initiating event, internal response, plan, attempt, consequence, and reaction.

Story structure and meaning have also been evaluated using high point analyses (McCabe & Peterson, 1984; Ripich and Griffith, 1988; Schneider, Hayward, & Dube, 2006; Stein & Glenn, 1982). McCabe and Peterson (1984) analyzed children's narratives using story grammar, high point, and dependency (linguistic complexity or propositions) analyses. Story-raters applied a subjective six-point scale to identify the "good" stories. Story components and structural patterns were analyzed by Schneider, Hayward, and Dube (2006) and this approach to narrative analysis was suggested as a useful component in a speech language assessment. The authors encouraged clinicians to obtain local norms for narrative content and structure utilizing their protocol.

Another form of narrative analysis, the Narrative Scoring Scheme (NSS), (Miller & Chapman, 2008) is an automated measurement tool based on the work of Stein and Glenn (1979, 1982). The analysis is associated with the Systematic Analysis of Language Transcripts (SALT) (Miller & Chapman, 2008) software and is of particular relevance to this research. The NSS represents a purportedly objective narrative structure scoring system by providing explicit examples of scoring criteria for story grammar categories. Speech-language pathologists who include narrative analysis in their assessment of children's language skills often use this clinical tool, and the narrative elements are familiar to educational practitioners as they contain the traditional elements of story grammar models. The NSS evaluates seven narrative dimensions: (1) introduction–setting and characters; (2) character development main character(s) and supporting character(s) with first person character voice dialogue; (3) mental states–frequency and vocabulary diversity of emotions and thought processes; (4) referencing–clear antecedents to pronouns and references; (5) conflict resolution–thorough description to advance the story; (6) cohesion–logical sequencing with smooth transitions; and (7) conclusion–final event concludes and the story is wrapped up. The story-rater applies a five-point scaled score (0–*minimal/ immature*, 3–*emerging*, and 5–*proficient characteristic*) for each dimension and these are summed to arrive at a total NSS score. A scoring rubric is provided to guide the scoring.

In addition to the analysis method, story elicitation methods and the context in which they are collected are influential factors to consider when evaluating narratives (Gutierrez-Clellen & Quinn, 1993; Melzi, 2000; Pesco, 1994; Ripich, & Griffith, 1988; Schneider et al., 2006;). The research conducted by Ripich and Griffith (1988) utilized picture sequences to elicit stories. The situation of joint-focus between the story-teller and listener provided by the pictures was found to have an influence on the type and amount of descriptive language and the story components used by the storyteller. Schneider et al. (2006) investigated picture-elicited stories of children and this study brought to my attention the importance of using pictures that are suitable and relevant to First Nations populations as an important consideration in using this approach to elicit narratives. Since narrative elicitation methods have an impact on the information presented in stories, a culturally familiar setting with known participants was chosen for use in the present research. This provided children with freedom to share stories in a circle with peers. This approach is supported in a study conducted by Gutierrez-Clellen and Quinn (1993), where different means of assessing narratives with various ethnic groups of children was explored, and in which the authors recommend that "the examiner should consider the 'naturalness' or cultural relevancy of the methods used to elicit the children's stories" (Gutierrez-Clellen & Quinn, 1993, p. 4). Finally, research by Melzi (2000) emphasizes the importance of sharing personal event stories as a vehicle for children to share their feelings and opinions instead of simply retelling factual information. Pesco (1994) elicited personal event stories in storytelling circles with Algonquin children. I was

inspired by this study as circles are a culturally relevant eliciting context.

Finally, a large body of research has documented cultural variations that exist in the ways in which narratives are constructed and organized, and also in how these narratives should be viewed and analyzed (Bliss and McCabe, 2008; Gutierrez-Clellen, Pena & Quinn, 1995; Gutierrez-Clellen & Quinn, 1993; Johnston, 2007, 1982). Chambers Erasmus (1989) and Johnston and Wong (2002) described aspects of cultural mismatches in performance expectations that interfere with Aboriginal student success. These investigators emphasize the importance of storytellers' perspectives and cultural orientations as important factors to be considered in understanding and assessing storytelling. Differences in perspective and interpretation may lead to deficit interpretations of children's narrative abilities in the classroom when teachers expect a traditional literate style in oral language and narrative formulation (Michaels, 1981). Nevertheless, Bliss and McCabe (2008) recommend that, if the long-term goal for all children is academic success, all students regardless of their cultural background should be taught to comprehend and tell classically structured narratives.

Aboriginal Storytelling

Aboriginal storytelling is a cultural approach to learning where listeners make their own meaning according to their level of readiness and each story challenges the listener with new learning. Each retelling of a story is valid; however certain narrative details and content may be pertinent to only a specific geographic region or tribal area. For example, linguistic anthropologist, Valentine (1995), described Ojibway stories as representing two narrative categories, the *tipaacimowinan*, which are stories of historical and personal importance, anecdotes, personal accounts, and amusing tales, and the *aatisoohkaanan*, which are sacred stories and legend-myths. Some oral stories may combine both elements by being set in current times and including a mythical character.

Piquemal (2003) describes the circular structure of traditional tribal narrative (e.g. events within events and meaning piled on meaning) as a story unfolds. The circular structure means that the listener/teller is central and the experience of the story radiates outward in a three-dimensional, interconnected spiral. The form and structure are unlike those of Western fiction in that they are not tied to any particular time line, main character, or event. Rather than a 'good' versus 'evil' order (or 'Western binary'), these stories focus on a concern for balance and harmony. Meanings arise from the story in a holistic context and a moral may not be stated explicitly. Instead, the listener is expected to construct meaning over time, both during and after the storytelling event. Narratives are shaped by the interaction of the storyteller and the listeners and therefore are subject to change when being retold.

Cavender (1996) illustrates the important role of oral history and narrative. Dakota oral tradition includes oral history and ensures each generation understands its own history and responsibilities to future generations. Story repetition is an important acquired skill arising from rigorous and extensive training in Dakota life. The storyteller's connection to the land and place is solidified with each telling of a story. Dakota stories are not written, and Dakota people are responsible for their repetition. These are not merely interesting stories or even the simple dissemination of historical facts. They are, more importantly, transmissions of culture upon which our survival as a people depends. The learning of these stories is a lifelong process and, likewise, the rewards of that process last a lifetime (Cavender, 1996, p. 13). The author concludes that stories help the young people, the children, and grandchildren of the elders and storytellers gain an understanding of where they came from, who they are, and what is expected of them.

Aboriginal scholars Archibald (1997), Cavender (1996), Howard (1999), Mader (1996), and Simpson (2000) illustrate how traditional stories provide a lens to see the past and a context to interpret experience. These authors investigated storytelling and oral traditions in a variety of Aboriginal communities by working closely with Elders who use stories about their experience as pedagogy. This illustrates the importance of story within the Aboriginal oral tradition. Mader (1996), for example, studied the stories of seven traditional educators in a northern Alberta Cree community. She described these teachers as being community Elders and illustrated the learning process in a First Nation learning context, sharing insights gained. Elders are respected for their wisdom and do not necessarily have to be old to be given this honour. These Elders freely offered their wisdom to living generations of their people in order to connect them harmoniously with their past, present, and future and for the purpose of sharing with newcomers. She describes how one Elder selected stories of her own life to facilitate her own learning that were not presented in chronological order since the timeline of some stories was not important. These authors also described the benefits of using storytelling in classrooms in order to enhance cultural values such as respect, responsibility, reciprocity, reverence, holism, interrelatedness, and synergy. Student involvement through story telling helps people "think,

feel, and be" (Archibald, 1997, p. 212) and solidifies responsibility to future generations and connection to the land and place. Cavender (1996) describes how the oral tradition often includes rigorous and extensive training in oral history and story repetition and requires significant competence and skill. Howard (1999) describes how oral storytelling provides an opportunity for the storyteller to share a message that reinforces important cultural values. Simpson (2000) and others have described how the oral tradition may be used for transmitting knowledge, worldview, and learning among Anishinaabek people by effectively using storytelling in teaching and learning. Scholars including Chambers Erasmus (1989), Kanu (2002) and Van der Wey (2001), have also investigated how Aboriginal storytelling and personal event stories may be used to enhance learning. The authors describe how Aboriginal students are culturally socialized to learn through storytelling and are comfortable engaging in classrooms that utilize storytelling as an oral instructional method. Teacher and peer understanding of the individual's reflective practice is facilitated and class discussion and further inquiry is deepened through sharing a personal event story about culturally relevant field trips or experiences. Teachers who listen as Aboriginal children disclose who they are through their stories can extend the competencies that these children bring to school by confirming and validating their experiences, knowledge, and the cultural context where experiences and knowledge are situated.

The Structure of Aboriginal Children's Narratives

Relatively little is known about the nature of Aboriginal children's storytelling in general and its application to learning in particular. An extensive search of the academic literature was conducted to identify any existing research supporting and acknowledging Aboriginal children's ways of knowing and learning and their relationship to narrative structure, content, and use. The few studies of Aboriginal children's narratives identified through the search include Cronin (1982), Kay-Raining Bird and Vetter (1994), and Pesco (1994). These authors describe Aboriginal children's narratives using the perspective of Western traditions of structure and meaning and critically examine the adequacy of those perspectives in light of social and cultural aspects of storytelling. The researchers propose that North American researchers' ways of eliciting narratives is different from how stories are told in First Nation contexts.

Pesco (1994) gathered 'shared experience narratives' from Algonquin children aged 10 to 13 years, in Rapid Lake, Québec. High point analysis revealed complete or complex episodes present in the story structure. However, internal response and internal plan were typically absent. Pesco concluded that an emphasis on goal-directed behaviour was not suited to Algonquin children's narratives. Also, half the stories ended at the high point without a resolution, a component that is typically expected in mainstream stories. Rather than interpreting this pattern as indicative of less-developed structure, Pesco viewed the prevalence of the 'ending at the high point' pattern as possibly reflecting local standards for storytelling and participants' desire to engage listeners and keep them in the story realm. A second key finding from Pesco's study was that of the importance of the teller-listener relationship. Algonquin children's narratives placed equal value on relating to each other and relating events during the storytelling interactions with peers. This interesting phenomenon suggests that the storytelling context is of great importance when sampling Aboriginal children's narratives that has implications for storytelling curriculum activities as well. Cronin (1982) studied grade 6 Cree and Métis children in Lac La Biche, Alberta and illustrated the importance of teaching Cree story structure in schools. The Cree narrative was described as deviating from the 'ideal structure' used in the school system. The study showed that the students lacked significant knowledge of traditional Cree story structure and were better able to recall the conventional European structure. This was attributed to these Cree students having been exposed to and learning to produce the well-established Euro-American story schema after six years of attendance at a large integrated school.

Kay-Raining Bird and Vetter (1994) gathered stories from Chippewa-Cree children in grades 1, 3, and 5 on the Rocky Boy Reservation in Montana. The content and structure of the stories were analyzed to compare narrative features from traditional (strong Cree cultural influence in the home) versus non-traditional (acculturated life-style) students and a diverse range of story structures were found within this cultural group. They concluded that episodic structure was an appropriate means of analyzing Aboriginal narratives and that older children told stories that included more complete episodes, obstacles, elaborated endings, and multiple, causally connected episodes than did younger children. Story content analysis showed that intrapersonal obstacles were used only by children in the oldest group. A number of later-developing aspects of story content were identified that were related to Cree cultural influences and these were evident in the narratives from the traditional students. The developmental course for story structure and content was seen to vary between the groups as a function of culture. Despite the sensitivity of the episodic analysis, these researchers felt that use of emically-derived

structural accounts rather than the etically-derived clinical analyses that they employed would have provided a better description of the stories of Chippewa-Cree children. They recommended future research to contrast etic measures with emic accounts of the same stories produced by Aboriginal children.

In spite of this research base, in most cases Aboriginal children's narratives continue to be evaluated with reference to traditional protocols that are not based on standards for good storytelling derived from within the children's own culture. In many cases, speech-language pathologists continue to apply the elements of classic Western stories as learning and mastery targets for all children. Given the findings of the few studies reviewed above, such an approach has the potential to result in deficit interpretations of Aboriginal children's narrative skills. A lack of understanding of Aboriginal children's unique speech, language, and narrative abilities may interfere with a positive and optimistic perspective and reduce available opportunities for them to fully participate in the educational process. This deficit orientation regarding their competence is compounded by cultural and linguistic misjudgements and misunderstandings, even when English is the children's first language (Ball & Bernhardt, 2005; Ball & Bernhardt, 2008; Bernhardt, et al., 2007; Fadden & Lafrance, 2010; Heit & Blair, 1993; Peltier, 2009; Peltier, 2010a; Peltier, 2010b; Peltier, 2011; Sterzuk, 2008; Sterzuk, 2011).

These fundamental research and personal observations set the stage for the present study. I chose to investigate the components of Aboriginal children's narrative structure by applying a culturally appropriate narrative elicitation task and adopting an emically- derived narrative analysis protocol related to components and patterns of Aboriginal narrative schemes. The research project represents an attempt to bridge the gap between emic and etic perspectives of Aboriginal storytelling and to highlight the importance of these distinctions for the culturally appropriate evaluation of narrative competence for Aboriginal children.

The Present Study

I was privileged be able to conduct this ethnographically-driven research study that examined the narratives produced by Anishinaabek children of the Nipissing First Nation community in north-eastern Ontario. My position as a researcher in this study was supported by my personal membership in the Anishinaabe Nation, my understanding of community dynamics, my life experience in a First Nation community, and my working relationship in the Nipissing First Nation territory. An overarching goal was to address the knowledge gap surrounding Aboriginal children's oral language traditions and represent these as important and legitimate expressions of knowledge, beliefs, and traditions that have a rightful place in classrooms and that can be used to educate all children. This research took the form of an ethnographic study with opportunities to understand the research participants in their own context and to explore the culturally-specific meanings behind the data. The specific goals of the research were to:

1. create an emic or insider's research paradigm for consideration by future researchers;
2. explore Anishinaabek Elders' attitudes towards and evaluation of children's narratives;
3. inform the narrative assessment process used by speech-language pathologists, and
4. inform teacher evaluation and elicitation practices for First Nation children's narratives.

Method

Since the Aboriginal community values family and community involvement in decision-making, I approached the leadership via the Nipissing First Nation Education Committee several months prior to initiating the research project and received approval for the research study. I was cognizant of the need to include Elder's perspectives in my research approach, and initiating the study in the manner described below created many opportunities for us to develop a relationship by socializing, sharing personal anecdotes, and developing mutual understanding and trust.

Participants

Both purposeful and convenience participant recruitment methods were employed within the specific First Nation community of Nipissing First Nation, as this afforded an authentic and familiar group of Elders, students, and community members with interest in this topic. Purposeful sampling means that participants are not randomly selected but instead are intentionally invited to participate in the research due to their personal knowledge and expertise.

Elders. In the case of this study, Elders were purposefully selected based on two criteria: that their first language was Anishinaabemowin; and that they had not attended formal schooling beyond high school. I established these criteria since individuals with these qualities are known as "keepers of the Ojibway language," meaning that Anishinaabemowin frames their perceptions of orality and they possess an

"Indian mind" or Anishinaabe worldview. The Aboriginal language frames one's perceptual and cognitive processes, and a reduced number of years in formal education minimizes the impact of acculturation to Western perspectives. These criteria were especially relevant so that Elder ratings would depict preference for children's stories that exuded features of Aboriginal language or narrative style rather than those of the Western perspective that is upheld in the formal school setting. These selection criteria resulted in a small sample, since those individuals who met them were elderly and very few in number.

Three Elders known to me were initially approached about the project to gain their support, and these Elders then referred me to others of similar backgrounds. Eight Elders were visited a few times over a six-month period in order to establish rapport and a level of trust. From the outset, it was explained to each Elder that I planned to carry out a research project about children's storytelling in the community. Four Elders consented to participate in the study. I provided them with a verbal explanation of how the study information would be collected and used, and they were assured of anonymity if they so desired. Each Elder was presented with the option of giving free and informed consent verbally and having this tape-recorded, or of providing written consent. The presentation of tobacco is a culturally appropriate way to show respect and to ask for help. The tobacco offering to Elders reflects the Anishinaabe understanding that life and thus, knowledge originate with the Creator. Sharing of one's knowledge acknowledges spiritual connection. Two Elders chose to receive a tobacco offering from the researcher as their scripted informed consent was explained and obtained. The other two Elders chose to have the researcher read the information to them, outlining their role and the request for their free and informed consent. All four Elders voluntarily signed the informed consent form that was provided. These Elders' time and dedication to this project were considered with reverence.

Children. Child participants were eight children within the age range of 8 to 10 years. All children were English-speaking, none were bilingual. The child participants represented a convenience sampling of 24 children who were approached and who agreed to participate in the project. Signed parental consent forms were obtained and the children's assent for the audio-recording of their narratives was obtained verbally using a pre-determined script that was read to all children. Two girls were in grade 3, one boy and two girls were in grade 4, and two boys and one girl were in grade 5. Each child told from 1 to 7 stories, resulting in a total of 36 stories.

Eliciting Children's Stories: Storytelling Circles

Four children's storytelling circles, each lasting an hour and a half, were held within the community. Since narrative elicitation methods have been shown to impact the information presented in a story as described above, (Gutierrez-Clellen & Quinn, 1993; Melzi, 2000; Pesco, 1994; Ripich & Griffith, 1988; Schneider et al., 2006), a familiar setting with known participants was intentionally selected. This provided children with the freedom to share their stories in a circle with familiar peers. The peer storytelling circles described by Pesco (1994) were used as the narrative elicitation context in this study. A circle is a culturally relevant setting conducive to storytelling, and circle protocol ensured that each individual's story was listened to by everyone in the circle. All of the stories produced by the children were audio recorded.

I opened each storytelling circle by explaining the traditional circle protocol to the children, who were seated on the floor. A "talking stone" (a round, smooth rock) was introduced, and it was explained that the stone would help each person to listen respectfully, remember, and share openly from the heart. The person holding the stone was to be the speaker, and when finished, he or she would hand the stone over to the person on the left, thus ensuring that the circle flowed in a clock-wise direction. Movement in a clock-wise direction represents following the route of the sun and speaking your truth that flows from your heart as perceived by Anishinaabek people. The passing of the stone signalled that the speaker was finished telling their story, and this precluded the need for prompting the child to say more or to verbally indicate when the story was complete. The importance of not interrupting or correcting a storyteller was emphasized and, in the situation where a personal experience had been shared by two or more members of the circle, the option to recount the story from one's own perspective was welcomed when his or her turn arrived. The option of passing the stone on to the next person without sharing a personal event narrative was provided, and in a few instances this option was used. There was no expectation that an individual's story would be scrutinized by peers or by the facilitator in the circle. Each participant was instructed to take what they could from each sharing and to leave the rest. This supported the Aboriginal values of non-interference and personal holistic processing and learning that involves mental, physical, emotional, and spiritual elements.

In my role as the storytelling circle facilitator, I opened up each circle by sharing a personal event narrative to set the stage for sharing. I sat in the circle with the children and over

the course of the storytelling circles I shared one story about a childhood experience and one story about a recent outing. When the stone came around again, I passed the stone to the next person without telling my own story, to minimize my influence and modeling on the children's storytelling process and to allow more time for their narrations.

The circle format for storytelling was nonthreatening and created a respectful environment. Familiar peers participated in the circle, thus contributing to a child's feelings of trust and comfort in sharing. The children sat quietly and listened to their peers' narratives. More often than not, when it was their turn, they shared a story about a personal experience. The circle provided an environment conducive to self-expression in the absence of criticism or competition. On occasion, a previously told story influenced the next storyteller to tell a story with the same theme. This created a nice flow among storytellers in the group.

Eliciting Elders' Perspectives on "Good" Stories: Elder Gatherings

The audio taped stories were presented to the four participating Elders during two gatherings, each of which was no longer than one and a half hours in length. This meant that the imposition on the Elders' time for the rating and discussion of the stories was not excessive. Through ongoing discussion, a narrative coding protocol unfolded over time. This formed the basis for the story analysis and for the definition of what might be described as "good" Anishinaabe narratives. This method differs from that typically used in narrative analysis by using the iterative and incremental development of a narrative analysis framework in ways proposed by ethnographic research approaches (Leavitt, 1995; Nevins, 2004).

Elder Ratings. The process at the first gathering consisted of the Elders identifying their 'most liked' stories. As an Aboriginal person myself, I was aware that traditional Aboriginal people often believe that each child is whole and complete, bringing special and individualized gifts to the world from the Creator. Since such a belief system conflicts with the Elders' task of choosing or favouring one child's story over another, at the outset of the story rating session I explained to the Elders why it was important to judge each story in spite of the fact that this process was perhaps uncomfortable for them. Once I provided this explanation, the audio recording of each story was played for the group using speakers and each Elder completed a story rating scale individually and in confidence. Each story was identified numerically, with the identity of the storyteller undisclosed. The Elders listened to and rated each of the 36 stories using a binary scale: 1= *Did not like the story very much* or 2 = *Liked the story very much*. A rating of 2 meant that the Elder explicitly and definitively identified the story as "favourable or good" in contrast to those less favourable stories that received a rating of 1. This scale was used so that the stories receiving a score of 2 were easily sorted for further in-depth analysis and created a means to compare and contrast the stories in order to enrich the analysis.

All of the stories shared by the children in the storytelling circles were treated with reverence, for they are extremely special, offering insights into how each Anishinaabe child perceives the world, his or her relationships with family members, the First Nation community, and the land. Each story was assigned a title which is represented in the summary tables. The title of each story exemplifies topics and activities that were especially relevant to this group of Anishinaabe children.

Elder-Generated Codes. In the second Elder gathering, the stories that were rated as being liked by the Elders were listened to again. After the digital recording of each of the stories was played for the group, the researcher facilitated a discussion of questions such as, "Why do you like this story?" or "Is there anything else that you like?" It was anticipated that some of the Elders might prefer to speak in Anishinaabemowin, as their use of the mother tongue was potentially more conducive to providing detailed descriptions of the nature being requested in this discussion, and also since use of the English language might present a linguistic barrier to the accurate expression of what they truly wanted to convey. An Anishinaabemowin interpreter was present during the Elder Panel discussion to provide the option of responding in English or Anishnaabemowin, however this option was only rarely used during the session. All Elders participated in the session and had no difficulty expressing themselves in English. The Elders' comments and responses to the children's stories were audio- recorded for further analysis. The researcher summed up their responses verbally throughout the discussion period and also wrote them on a flip chart.

Development and Elaboration of Elder Codes. The data categories that emerged directly from the Elder participants' comments were considered to represent an emically-derived measure of Anishinaabe children's personal narratives. The emically-derived protocol was then applied to analyze the narratives of the Anishinaabek children, identifying story schemes, structure, and content that were relevant to the Anishinaabe worldview. The development of such a unique analysis protocol was central to creating a culturally relevant lens, rather than

Table 1. Elder-identified preferred narrative elements and themes and frequency of occurrence in the narratives

Code Number	Code Content/Description	Frequency of Occurrence in Elders' Measure
1	flow of events and ideas without interruption	17
2	humour or amusement	16
3	use of descriptive language by the narrator to create a vivid picture	17
4	a sense of adventure and excitement	6
5	statements or expression of emotion and feelings	12
6	"Ways of thinking" - Listener's insight into the story-teller's thinking process, listener's inquiry and reflection	14
7	attention-grabbing or unexpected events	16
8	Mention of a savoured treat	2
9	dialogue and storyteller animation (voice)	12
10	reference to the extraordinary or unexplained	4
11	examples of good moral character and values	4
12	familiar settings and events that are memorable	7
13	pleasant childhood experience	6
14	unpleasant childhood experience	5
15	story induces distant memories in the Elder from shared experiences	3
16	reference to relationships with family and community members	15
17	not lengthy	11
18	lengthy	7
19	ending stated	11
20	ending not stated	7
21	intergenerational story passed down from family members	3

applying prescriptive codes based on Western concepts and themes. According to Rubin and Rubin (2005, p. 209), such an approach provides opportunities for generating original insights from the research data, thus avoiding "testing someone else's theory rather than building one of your own".

Based on the content analysis, a list of 21 Elder-identified preferred narrative elements and themes was derived from the rating and discussion of the children's stories through an ethnographic process of grouping similar comments together known as content analysis. The Elder codes used for the analysis of the children's stories are provided in Table 1.

Examples of the comments made by the Elders during the second Elder's panel gathering that led to the generation of the coding system used to analyze the children's narratives are provided in Appendix A.

Coding of Children's Stories with Elder-Generated Codes.

Each individual story was transcribed verbatim by the researcher following the conventions of the Systematic Analysis of Language Transcript (SALT) (Miller & Chapman, 2008) that included features of punctuation, dialogue, trailing off, and intonation. The transcribed stories were then coded by the researcher using the Elder-generated coding scheme presented in Table 1. These Elders' codes were entered into the utterance analysis option for hand-coding of the SALT software program (Miller & Chapman, 2008). The themes contained in the narratives were then analyzed using SALT and a frequency count of each of the Elder codes was generated.

Use of Narrative Scoring System. The Narrative Scoring Scheme (NSS) of the SALT software program was also applied to the narratives to provide an analysis of the stories that captured the expected elements of traditional Western narratives and provided an index of each child's ability to produce a coherent narrative according to these standards. This provided a comparison for the analysis based on the Elders' coding system, with the intent to allow areas of agreement and disagreement that might be indicative of cultural differences in narrative structure and values to emerge. The NSS scores were decided upon by the researcher. The seven Story Characteristics that were scored included: introduction (setting, characters); character development; mental states; referencing; conflict resolution; cohesion; and conclusion. Each of these characteristics received a scaled score from 0 (minimal, immature) to 5 (proficient). Minimal/Immature characteristics were scored as 0 and a score of 1 was subjectively determined by the researcher. Emerging characteristics were scored as 3 and scores of 2 and 4 were subjectively determined by the researcher. A composite score was derived by adding the total of the seven characteristic scores. The highest possible composite score obtainable was 35. A good composite score is within the range of 15 to 35, while a poor composite score is with the range of 7 to 14. NSS Composite Scores are shown in Table 2.

Results & Discussion

Elder Ratings

The Elders' story rating scale sheets were tallied, revealing that 30 of the 36 stories had been assigned at least one rating of 2 (*Liked the story very much*). Of these, 18 were given a 2 rating by three of the four Elders. The researcher placed these 18 stories into the group of "preferred" stories. Six of the children's stories had been assigned a rating of 1 by all four Elders, and these were placed into the group of "not preferred" stories. The remaining 12 stories, which had received only one or two ratings of 2 by the Elders, were set aside. The audio-recorded Elder discussion was transcribed and comments regarding specific stories as well as general group comments made as they reminisced about life experiences that were related to the children's story themes were noted. A summary of the story titles of the preferred and not preferred stories and the story rating and code score they received from the Elders is provided in Table 2.

Elders' Culturally Valued Narrative Elements and Themes

The Anishinaabe Elders applied their insider "ways of thinking" in their evaluations of preferred and non-preferred narratives. They preferred stories that gave insight into the storyteller's or character's thinking process and stories that caused the listener to engage in further thought or interpretation in response to the story. These are important aspects of Anishinaabe orality, as they serve as learning tools. As the listener engages in active thinking and as stories are remembered and revisited over the life span, new learnings unfold for the individual. A summary of the frequency with which each of the Elder- generated codes was applied to the 24 (preferred and not preferred) narratives can be found in Table 1. The frequency of Elder Codes for all stories ranged from 2 (lowest) to 17 (highest). As shown in Table 2, the Elder Preferred stories had high counts of Elders' codes that ranged from 8 to 17, while the least preferred stories had lower counts that ranged from 6 to 8.

Recounts of personal events were the predominant type of narrative shared by the children in the storytelling circles, as these were the type of narratives that were modelled in the initial story telling circles. The child storyteller usually

Table 2. Story titles, Elder Story Rating, Elder Story Score and NSS Scores

Brief Story Title	Total story length	Story Rating Elder 1	Story Rating Elder 2	Story Rating Elder 3	Story Rating Elder 4	Elder Code Score	NSS Composite Score
1. Grandpa's Story about a Stink Bomb	1:09	2	2	2	2	9	30
3. 4-Wheeling in the Garden	1:27	2	2	2	2	9	33
7. The Car Crash	2:20	2	2	2	2	10	31
8. How I Broke my Arm	3:17	2	2	2	2	9	35
9. The Bear at the Dump	2:38	2	2	2	2	8	34
10. My Pets	13:03	2	2	2	2	17	34
11. The Leech at the Beach	3:25	2	2	2	2	10	34
12. My Pet Bunny	3:35	2	2	2	2	12	33
17. My Cousin's Ruined Dress	1:23	2	2	2	2	11	30
2. Skating at the Outdoor Rink	1:35	1	2	2	2	10	31
4. Skating To Dokis Point	1:23	1	2	2	2	13	32
5 .Trip to NY Islander Hockey Game	1:52	1	2	2	2	10	33
6. Getting Pushed in a Hole	1:44	2	1	2	2	9	34
13. Family Day at Trout Lake	2:33	2	1	2	2	12	33
14. Summer Program Water Day	1:09	2	2	1	2	9	26
15. A Spoiled Surprise	:53	2	2	1	2	8	34
16. How I got my Family Clan	1:07	2	1	2	2	10	29
18. Trip to Ottawa Senator's Hockey Game	1:53	2	2	2	1	13	31
19. Slippery Slide	:58	1	1	1	1	6	30
20. Gibralter Rock Accident	:50	1	1	1	1	7	23

21. Slammed The Door on my Thumb	1:38	1	1	1	1	6	31
22. My New Dog "Ben"	1:11	1	1	1	1	7	30
23. Trip to Kettle Point	1:08	1	1	1	1	7	34
24 .The Axe Accident	:42	1	1	1	1	8	31

narrated their stories from the perspective of an observer or co-participant in stories related to activities with family or friends.

Many of the preferred stories were about shared activities with family and community members, and a number of these stories took place on the land. These themes illustrate the importance of Anishinaabe kinship relations and grounding of an individual as one develops a relationship with Mother Earth and nature. A number of stories had an element of surprise or suspense and included unexpected and unexplained elements (Elder Codes 5, 6). Examples of such stories include the narrative about 'The bear at the dump', and the narrative about 'How I received my Clan'. A sense of humility was usually evident as the child was not usually depicted as the main character and was not described as being superior to others. Some stories involved taking pleasure from being tricked or fooled or behaving in a naive or childish way (Elder Codes 2 and 7). 'A Spoiled Surprise', 'Getting Pushed in a Hole', and 'My Pets' are examples of such stories.

The most frequently applied Elder-generated codes were: flow of events and ideas without interruption, humour or amusement, attention-grabbing or unexpected events, reference to relationships with family and community members, use of descriptive language by the narrator to create a vivid picture, statements or expression of emotion and feelings, dialogue and storyteller animation (voice), not lengthy, and ending stated.

Of the coding categories represented in Table 1, four of the Elder codes are of particular relevance to this study and are therefore discussed in more detail to illustrate the important culturally-specific meaning behind the data.

Humorous stories (Elder code Number 2) were funny and amusing. Humour plays a large role in Anishinaabe storytelling and orality, as evidenced by many of the stories spontaneously narrated by the Elders during our gatherings. The Elder storytellers themselves frequently expressed their amusement while telling a story, and the listeners frequently responded with laughter, however not all of these stories were recounts of happy or pleasant events. This requires further explanation as Anishinaabe humour is not always evident to a non-Anishinaabe. Non-Anishinaabe readers may be surprised at some of the events that the Elders considered to be unpleasant childhood experiences but that were nevertheless categorized as humorous. Non-Aboriginal people may feel that a humorous response to such situations is not in good taste. The Anishinaabe sense of humour is culturally based and Anishinaabek are socialized differently than people from other cultures, backgrounds, and experiences. Humour has supported the "undying spirit" of the Anishinaabek over the course of history and usually in an unpleasant situation the humorous side of things is emphasized.

Six of the preferred stories were coded as pleasant childhood experiences and included elements of family harmony and fun, while five were coded as unpleasant stories about accidents, brushes with death, and unhappy feelings. This illustrates that the Elders did not value pleasant childhood experience stories over those stories that represented an unpleasant experience for the storyteller. This accords with traditional Anishinaabe values concerning life experience. It is natural that a person experiences both hardships and enjoyable times in the circle of life. It is believed that wisdom is gained from both positive and negative life experiences, and that the Creator never subjects a person to something that he or she is not ready for along his or her learning path. It can be said that someone who has experienced and learned from both positive and negative events has an old Spirit and will become a Spirit Guide to support other younger Spirits in their life journeys on the Earth.

Intergenerational stories (Elder code 21) were stories that had been received by the storyteller from a family member. This factor is especially relevant to the Aboriginal culture and socialization practice. The community respects those who relate stories from the past to support an oral history and connection to place/land/family.

Table 3. Summary of NSS coding

Brief Story Title	Introduction	Character Development	Mental State	Referencing	Conflict Resolution	Cohesion	Conclusion
1. Grandpa's Story about a Stink Bomb	5	5	1	5	4	5	5
3. 4-Wheeling in the Garden	4	5	4	5	5	5	5
7. The Car Crash	5	5	5	5	4	3	4
8. How I Broke my Arm	5	5	5	5	5	5	5
9. The Bear at the Dump	4	5	5	5	5	5	5
10. My Pets	5	5	5	5	5	4	5
11. The Leech at the Beach	5	5	5	5	5	5	5
12. My Pet Bunny	4	5	5	5	5	5	4
17. My Cousin's Ruined Dress	5	5	5	4	5	5	1
2. Skating at the Outdoor Rink	4	5	4	5	5	5	3
4. Skating To Dokis Point		5	4	5	4	5	4
5. Trip to NY Islander Hockey Game	5	5	5	5	5	4	4
6. Getting Pushed in a Hole	5	5	5	5	5	5	4
13. Family Day at Trout Lake	5	5	5	5	5	4	4
14. Summer Program Water Day	4	3	4	5	4	5	1
15. A Spoiled Surprise	5	5	5	5	5	5	4
16. How I got my Family Clan	5	5	4	4	5	5	1
18. Trip to Ottawa Senator's Hockey Game	4	5	5	5	5	3	4

19. Slippery Slide	3	4	4	5	5	5	4
20. Gibralter Rock Accident	4	4	1	5	5	3	1
21. Slammed the Door on my Thumb	5	4	4	5	5	3	5
22. My New Dog "Ben"	5	3	4	5	5	4	4
23. Trip to Kettle Point	5	5	5	5	5	5	4
24. The Axe Accident	5	5	4	5	4	5	3

Cultural beliefs, and values are perpetuated through the oral tradition and stories are passed down from generation to generation.

As shown in Table 2, six of the stories that were not preferred (received an Elder rating of "1" from each Elder) were less than two minutes in duration. However, 11 of the 16 preferred stories were also less than two minutes in duration. These were all assigned the Elder code 17 (not lengthy). This demonstrates that story length alone was not consistently associated with positive Elder preferences, and that shorter stories were valued by Elders under certain circumstances and when combined with other elements.

NSS Scoring

As can be seen in Table 3, the NSS story analyses demonstrate that the Anishinaabe storytellers were judged to have: *emerging* to *proficient* (NSS Scores from 3 to 5) application of story introduction features such as setting and characters; *emerging* to *proficient* (NSS Scores from 3 to 5) application of character development elements; *minimal/immature, emerging,* or *proficient* (NSS Scores from 1 to 5) application of mental state references; *emerging* to *proficient* (NSS Scores of 4 or 5) use of antecedents to pronouns and clear referents; *emerging* to *proficient* (NSS Scores of 4 or 5) application of conflict resolution; *emerging* to *proficient* (NSS Scores from 3 to 5) application of cohesion where events follow a logical order and less emphasis is placed on minor events; and *minimal/immature, emerging,* or *proficient* (NSS Scores from 1 to 5) application of conclusion where the story is clearly wrapped up and the final event is drawn to a conclusion.

Comparison of Elder and NSS Coding

The comparison of the findings of the Elder-generated analyses and the NSS scoring results shown in Table 2 indicates that a number of features of Anishinaabe story structure and content are the same as or similar to many of the components considered to be valued in conventional Western-perspective storytelling analysis approaches incorporated in the Narrative Scoring Scheme. It can be seen that, for some stories, a high Elder Code Score corresponded with a high NSS Composite Score. For example, the *My Pets* story obtained an Elder Code Score of 17 and an NSS Composite Score of 34, and the *Skating To Dokis Point* story obtained an Elder Code Score of 13 and a total an NSS Composite Score of 32.

However, a comparison of preferred versus not preferred stories also reveals an incongruence between scoring codes for many of the elicited narratives. NSS Composite Scores for the preferred stories ranged from 26 to 35 (within the range of composite scores for good stories) and the scores for the not preferred stories ranged from 23 to 34 (also within the range of composite scores for good stories). In other words, some stories that were not considered by the Elders to have a significant number of features of a good story nevertheless obtained high NSS values when a Western-perspective lens was applied. The *Trip to Kettle Point* story was "not preferred," (and received an Elder Code Score of 7), yet this story had a total NSS Composite score of 34, which represents a slightly higher score than that of two of the Elders' preferred stories. Similarly, the *Slammed the Door on My Thumb* story obtained only an Elder Code Score of 6 and yet received a total NSS Score of 31. These findings show that the narrative analysis derived from a Western based perspective such as the NSS is not always congruent with a narrative analysis based on the Anishinaabe perspective, and illustrates how the application of an emic narrative evaluation scheme sometimes yields different results than an etic or imposed clinical tool. The Elder derived coding highlighted elements of the elicited narratives that were culturally driven while the

NSS highlighted a suggested level of proficiency in narrative development that was not intricately linked to the story content or to cultural values regarding good storytelling from an Aboriginal perspective. The Elder Story Ratings and Elder Codes and Scores provided rich data that reflected cultural traditions around Aboriginal narratives.

Summary

In this research, an emically-derived standard was used to examine and evaluate Anishinaabe children's oral stories. An etically-derived assessment protocol represented by the *SALT* computer software and Narrative Scoring Scheme was applied and compared to the scoring provided by the four Elders who were well-versed in the elements of Anishinaabe orality. The story features investigated with a conventional story analysis protocol included the traditional narrative components including the presence of an introduction; character development; mental states, referencing; conflict resolution; cohesion; and conclusion. Each characteristic received a subjective scaled score from 0 to 5, resulting in a total NSS Composite Score for each story. The emically-derived protocol of 21 categories developed by the Elders was also applied to each story, and a total Elder Code Score was obtained for each story.

A comparison was made between the etic and emic standards applied to evaluate the stories and the data illustrate that narrative analysis derived from a Western-based perspective as represented by the NSS was not always congruent with a narrative analysis based on the Anishinaabe perspective. The application of an emic narrative evaluation scheme yielded different but in some cases complimentary results to those obtained through the use of an etic or Western clinical tool. The research shed light on Anishinaabek Elders' attitudes towards and evaluation of children's narratives and illustrates that oral storytelling tasks can be considered as appropriate activities for eliciting and investigating important culturally relevant discourse elements of communication that underlie the communicative competence of Aboriginal children. Results of the study reveal culturally relevant preferences for components of narratives based on the perceptions of Elders who value Aboriginal orality.

Engagement with the Anishinabek community was positive and the children were happy to share personal event narratives and to have time with other children after school. The Elders expressed happiness and gratitude towards the children for their enjoyable stories and were honoured to participate. The researcher enjoyed seeing the world through the eyes of the children as stories were shared. The circle format for storytelling was nonthreatening and created a respectful environment. At times a story also stirred the memory of the Elders and they reminisced about times gone by, sharing a personal experience narrative with the same theme.

In primary grade classrooms, teachers frequently engage children in a circle setting such as story time or show and tell. A circle setting for sharing of personal event narratives can readily be applied in the classroom and it may be helpful to introduce a relevant theme to create focus for the group, especially for Anishinaabe students. Since a storytelling circle is appropriate for bringing together children and Elders, some teachers may wish to approach an Anishinaabe Elder from the children's community to join the circle. With the involvement of an Elder, the traditional circle protocol and use of a talking stick or stone would be appropriate. A child's emotional state and sense of well-being are important factors that facilitate memory and learning. Classrooms that nurture children and exude pleasant surroundings are more conducive to child learning than impersonal, anxiety-ridden environments. When children are given the opportunity to share stories in the classroom, information is gained by teachers and peers about the child's cultural background, interests, family, and community. This can support cultural understanding, and such shared knowledge can facilitate relationship development within the school.

Limitations of the study include 1) the small sample size, that affects the generalizability of the findings to other Aboriginal cultural communities and classrooms and 2) the lack of coding reliability for both the Elder derived coding and the NSS scoring. The narratives were coded by the researcher who was familiar with the children who produced the stories and with the comments made by the Elders about each of the stories. As a result it is possible that some elements of bias may have entered into the coding process that might have affected the final analyses.

Nevertheless, the study presents a novel, emically-derived perspective for the evaluation of the oral stories of Anishinaabe children to inform the narrative assessment process used by speech-language pathologists, and inform teacher evaluation and elicitation practices for First Nation children's narratives. An emic or insider's research paradigm has been created and presented to inform future researchers and positively influence use of ethnographic and qualitative research in this area. The data illustrate Aboriginal children's narrative skills and communicative competency and expand the understanding of language socialization through engagement in meaning-making with the Elders. The resulting list of 21 emically-derived

story features is now available for use by educators and speech language clinicians. This will support educators' and practitioners' acknowledgement of the value of oral storytelling in the school setting.

The study also provides an example of how to conduct research in a respectful and collaborative manner in Aboriginal communities. Although my identity as an Anishinaabe person helped me to gain access to the community, preceding with transparency and respect enhances the possibility of conducting research in Aboriginal communities for other researchers as well. The Elders who participated were provided with an opportunity to confirm the accuracy of the data collected from them and this upheld the relationship between research participants and the researcher and reconfirmed their informed consent. The stories shared by the children have been regarded with reverence, for they are extremely special, offering insights into how each Anishinaabe child perceives the world, his or her relationships with family members and the First Nation community and the land. It is important to give back to the community. The Elders and children who participated in the research were presented with gifts of appreciation and the results of the research was shared with the Nipissing First Nation community. The Education Committee members, Chief and Council, participants and family members have access to the thesis at the First Nation Education office. The findings of this study may inform speech and language intervention for the Nipissing First Nation children.

This research provides a springboard for teachers and practitioners to explore the benefits of oral storytelling and the importance of establishing links to the Aboriginal community and legitimizing Aboriginal ways of knowing into the classroom. Future research should attempt to bridge the gap between emic and etic perspectives of Aboriginal storytelling and to highlight the importance of these distinctions for the evaluation of narrative competence for Aboriginal children. Additional ethnographic Aboriginal narrative studies are necessary to illustrate common threads and patterns from other communities with similar belief systems, political and economic histories, and cultural patterns of communication. It may be possible to identify characteristics that are shared in other Aboriginal communities that will permit the generalizability of information obtained from this study to diverse communities.

Aboriginal orality is an obvious bridge to literacy, academic success, and community participation. Oral storytelling activities present Aboriginal children with culturally sensitive and appropriate bridges to literacy in the language arts curriculum. Through storytelling, students can connect with peers and develop self-confidence as speakers. As teachers and clinicians engage with Aboriginal students in oral storytelling circles, their perceptions and response to the students will hopefully also shift towards greater acceptance and validation of FNEDs. Frequent opportunities to speak and listen to non-Aboriginal peers in class will also provide exposure to standard English language models for children speaking FNEDs that might support Aboriginal students in acquiring elements of standard English and become bidialectal. Teachers and practitioners should be encouraged to explore the benefits of infusing oral storytelling and oral language within the goals and objectives of the academic curriculum. Oral storytelling is also an appropriate segue for establishing links to the Aboriginal community and legitimizing Aboriginal ways of knowing in the classroom. Anishinaabek orality traditions are important and legitimate expressions of cultural knowledge, beliefs, and traditions that have a rightful place in classrooms and that can be used to educate *all* children.

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End Notes

[1]Anishinaabe and its plural form Anishinaabek refer to the Ojibway and Algonquin people, while Anishnaabemowin refers to their Aboriginal languages and dialects.

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APPENDIX A

Elders' comments	Elder Code description	Code Number
Sounded smooth, no interruptions or pauses, nice flow. The way they told the story right through. It just flowed without hesitation. Was a fast story. Did he take a breath when he was telling that story?	Flow of events and ideas without interruption	1
It was quite humorous. The ending was funny. She thought it was funny about going to the dressing room and listening to that RAP music. It was a funny story because her friend was trying to skate and she kept having these incidents. She fell down and couldn't get up. She went over the boards and thought it was funny after awhile and did it again. She tried to redo her mistake. It is funny because he gave it (uncle's gift) away before it was wrapped. It was like the other story. The surprise was spoiled. She talked about her father spoiling the surprise and when her mom told her, she just said, "Oh." The cat died from too many hairballs–that's what he thinks!	Humour Or Amusement	2
We can picture it. He described the things he was doing. The way he described his mother walked sideways so she wouldn't get poison ivy. They all seem to have a vivid memory. They are very descriptive about the circumstances of the story. It stayed in their mind. Descriptions of where she was and what they were doing. It kept it interesting. Hot day with nice, cold water.	Use of descriptive language by the narrator to create a vivid picture	3
It was quite the adventure. Everybody was excited about going on the trip. Sounded like it was the first time she went to the city, and she was excited.	A sense of adventure and excitement	4
He was afraid. They were excited to go to the party. His mother gets really sad when he loses his animals when they die on him. It had a happy ending for the bunny but sad for the boy because he had to give it up. Too bad the rabbit got away. Was quite a shock and surprise.	Statements or expression of emotion and feelings	5
He knew enough to stay in the car. He seems to be a thoughtful young man. He's thinking about "If we didn't drive our friend home, we would have got in the accident." He explains the names of his animals... their Ojibway names, and that's how he learns his Ojibway too. "Zii zii" means sugar. The cat died from too many hairballs–that's what he thinks! Was a story from way back. She hesitated for awhile until it come to her.	"Ways of thinking" - Listener's insight into the story-teller's thinking process, listener's inquiry and reflection	6
Interesting. There's something happening and you expect something else.	Attention-grabbing or unexpected events	7
He remembered he ate the candies. Popcorn. The treat at the end. Hot dogs!	Mention of a savoured treat	8

She was animated as she told the story. Her voice was rising up higher. The way their voice sounds. The story was about a little girl, and he tried to sound like one. She sounded excited and repeats herself.	Dialogue and storyteller animation (voice)	9
I never found that when I was a kid. Nice for the kids to get out there. I never got to see a big hockey game yet. Was a good trip for them.	Reference to the extraordinary or unexplained	10
Sounded like he really cared for them (his pets). The story belongs to the Spirit World and all this kinda stuff, and I guess that's why we liked it. You know I always like a little "Believe it or not" story. Sounds like he believes it.	Examples of good moral character and values	11
I liked it because maybe it's something that happened to me. I dropped popcorn (Lucky Elephant) and I picked it up slowly (as if savouring it). You can't throw that away! The rink is right there. Garden Village is about a mile along the shore to Dokis. I like Fun Day...break your neck, sore knees, sore butt.	Familiar settings and events that are memorable	12
Nice for the kids to get out there. Was a good trip for them. Sounds like it was fun.	Pleasant childhood experience	13
Nobody else got hurt, and that's a good thing. His mother gets really sad when he loses his animals when they die on him.	Unpleasant childhood experience.	14
Story about the wild bunny stimulated Henry to reminisce about his pet rabbit who ran away with a wild rabbit. Stimulated Linda's recall of the time her daughter had a bunny. Someone threw me off the dock. It brings you back, way back...having a good time on the ice...sliding...sore elbow.	Story induces distant memories in the Elder from shared experiences	15
He thinks his father is like a hero to him 'cause he's doing service to this man by helping him stay conscious until the ambulance comes. About him and his mother taking care of the dog. They're washing it in the sink. At least the family is together. Sounds like they had a satisfying day. A lot of people aren't doing that kind of thing anymore.	Reference to relationships with family and community members	16
A nice and short story. Not too long, and told it pretty fast.	Not Lengthy	17
It was so good I fell asleep (lengthy).	Lengthy	18
Some just stop but others tell you when they're done.	Ending stated	19
Some just stop, but others tell you when they're done.	Ending not stated	20
Relating a story that was told to her by her grandfather. The way she tells it she owns the story. She's very into it.	Intergenerational story passed down from family members	21

First Nations and Métis Early Literacy and Language Enrichment Program

Programme d'enrichissement précoce de littératie et du langage chez les Premières nations et les Métis

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Sandy Paddick

KEY WORDS
FIRST NATIONS
METIS
NARRATIVES
PHONOLOGICAL AWARENESS
CLASSROOM-BASED
LANGUAGE INTERVENTION

Abstract

This article describes a pilot intervention program that was specifically developed to address perceived areas of weakness in the early literacy abilities of First Nations, Métis, and Inuit children using a culturally adapted curriculum. The program arose as a result of a need identified by a school division in Northern Alberta to address concerns that children from First Nation and Métis backgrounds entering school were less prepared to develop reading skills than their non-Aboriginal peers. Teachers and principals indicated that young Aboriginal students did not begin school with the readiness skills required for success in the classroom. The school division contracted with Khan Communication Services, Inc. to implement a language enrichment program targeting children in the early elementary grades that would ensure that all children were equally prepared for the development of literacy skills and would be more likely to achieve reading success in higher grades. This article describes the program and presents preliminary outcome data. The findings resulted in the continuation and expansion of the program to all elementary schools in the School Division.

Abrégé

Cet article décrit un programme pilote d'intervention qui fut spécifiquement développé pour traiter des domaines perçus de faiblesse dans les habiletés précoces de littératie chez des enfants des Premières nations, Métis et Inuit utilisant un programme d'étude culturellement adapté. Le programme est né d'un besoin identifié par une division d'école du Nord de l'Alberta de répondre à des inquiétudes à l'effet que des enfants provenant de Premières nations et de familles Métis entraient à l'école moins préparés à développer des habiletés de lecture que leurs pairs non autochtones. Les enseignants et directeurs avaient indiqué que les jeunes élèves autochtones n'avaient pas commencé l'école avec la préparation nécessaire pour réussir en classe.

La division scolaire a accordé un contrat à Khan Communication Services Inc. pour mettre en œuvre un programme d'enrichissement du langage qui s'adressait aux enfants des premiers niveaux du primaire et qui garantirait que tous les enfants seraient également préparés à développer des habiletés en littératie et auraient plus de probabilités de réussir en lecture dans les classes plus avancées. Cet article décrit le programme et présente des données préliminaires de résultats. Les conclusions ont eu pour résultat la continuation et l'expansion du programme à toutes les écoles primaires de la division scolaire.

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Introduction

Children of First Nations and Métis background are often reported to arrive at school without having developed some of the underlying skills that are necessary for the acquisition of literacy (Peltier, 2010). This may in part be the result of differing language socialization practices in Aboriginal communities and in schools (Johnston & Wong, 2002). Khan Communication Services Inc. has had an extensive and on-going relationship with a school division in northern Alberta that serves First Nations and Métis children. Discussions with principals and teachers in the division schools confirmed concerns regarding the academic readiness skills of some of the young First Nation and Métis children they taught. The First Nations, Métis, and Inuit Early Literacy and Language Enrichment Project (FNMI-ELLEP) was designed in response to such concerns. The FMNI-ELLEP is a classroom based intervention program that was developed in response to these concerns.

The goal of the FNMI-ELLEP program was to enhance students' early literacy and language skills within a classroom setting in order to successfully meet curriculum expectations. Narrative language and phonological awareness abilities develop substantially in the early school age years and are positively correlated with academic performance (Brand, 2006; McCabe & Bliss, 2003;Rice, Hadley, & Alexander, 1993). In addition, story-telling is an important part of many Aboriginal cultures and was therefore considered to be a culturally appropriate vehicle for language learning for Aboriginal children. Therefore, the specific focus of the program was to develop student's narrative language and phonological awareness abilities.

The FNMI-ELLEP was developed by a speech-language pathologist from Khan Communication Services Inc. and implemented by teachers in kindergarten and grade one classrooms at two schools in northern Alberta, Canada. A total of nine teachers participated in this project; three kindergarten teachers and six grade one teachers. All but one first year kindergarten teacher had over five years of teaching experience. Most of the teachers had participated in cultural training experiences that involved elders coming to the school and talking about First Nations culture. None of the teachers were of First Nations or Métis descent.

Testing

Narrative and phonological awareness skills were tested. Speech-language pathologists pre-tested all children in the target classrooms who received parental consent and were either First Nations or Métis or were identified by teachers as either having average skills or being at academic risk. A total of 55 students in Kindergarten and grade one, ranging in age from 4 to 7 years were pre-tested. However, the School Division stipulated that, for the initial analysis of the effectiveness of the FNMI-ELLEP program only 15 students (6 in School A and 9 in School B; 16% of all children who participated in the program) were to be tested over time. However, during the course of the year, two children moved away, one child stopped coming to school and one child passed away in a tragic car accident. The 11 remaining students completed both pre- and post-testing in the areas of weakness (story-telling or phonological awareness or both). Three of the eleven children partook in the pre- and post-test of the ENNI only. Three others participated in the phonological awareness pre- and post-test only. Five out of the eleven children participated in both the ENNI and the phonological awareness pre- and post-test measures.

The 11 children who participated in the evaluation of the effectiveness of the program at pre- and post-testing were all of FNMI or Metis heritage. All 11 scored below age-level expectations on the measures of narrative ability (n = 8) and/or rhyming skills (n = 8) described below, at pre-test. Two of these children were diagnosed with speech and language difficulties. One had a severe expressive language delay (Child G) and the other a severe phonological and expressive language delay (Child F).

Narrative testing. Children's narrative abilities were tested using the *Edmonton Narrative Norms Instrument (ENNI*; Schneider, Dubé, &Hayward, 2005). The *ENNI* was normed on 300 typically developing children in Edmonton, Alberta, Canada. It assesses story telling skills in four- to nine-year-old children. The child tells a series of three stories to an examiner by looking at a sequence of pictures that portray each story. Stories include the same characters and are told in a pre-determined order. The stories are transcribed and a variety of micro- and macro-structural measures can be derived from the transcription. Since the focus of the classroom intervention was on improving a student's ability to recall and retell events in a story, a single measure was of interest for the present purposes; the story grammar score. This is a measure of a story's episodic structure. A scoring rubric is used to assess the child's ability to include characters, setting information, problems and their resolutions, and emotional reactions of characters to events in the stories. A score of 0 - 1 or 0 – 2 is allotted to each set of story components and a total raw score is derived. This is then converted to a standard score.

In addition, teachers were trained to collect data on the ability of the target children to retell a story during class in November and May using a criterion-referenced scoring

sheet (see Appendix A). The maximum score for this measure was 10. Teachers scored the children on-line as they told a story, rather than from a recording.

Phonological awareness testing. Phonological Awareness skills were assessed using two subtests of the *Phonological Assessment Test (PAT)* (Robertson & Salter, 2007), namely Identifying Rhymes and Producing Rhymes. Rhyming was the skill selected to be assessed because rhyming is the first in a hierarchy of phonological awareness skills developed by young children (Johnson & Roseman, 2003).

Training and Program Implementation

After pre-testing, each school received three in-services, three classroom demonstrations, and two parent workshops. The in-services were given in October, February and April of the 2010 - 2011 school year. All training was provided by a speech-language pathologist from Khan Communication Services Inc. The teacher in-services were provided in each school to the grade one and kindergarten teachers. Teachers were also provided time to discuss how to connect program strategies and goals to curriculum expectations.

Teacher In-services. The first in-service took place in October of 2010 in each school. All participating kindergarten and grade one teachers in the school took part in the two and a half hour in-service. The purpose of this initial in-service was to provide teachers with training on how to teach narrative and phonological awareness skills in the classroom. During this in-service, the results of the screenings were also shared and training was provided on how to target goals and collect data on each student's progress.

The following strategies, designed to support the use of stories in a classroom setting, were taught to teachers:

1. Give explicit instructions on how to listen and act out a story together.
2. Act out parts of the story with the class
3. Act out the full story using everyone in the class
4. Use visuals (i.e. puppets, props) to encourage interest in stories
5. Take pictures of the story re-tell – beginning, middle and end then use the pictures for sequencing and re-tell
6. Video–tape the story and then watch it on another day
7. Introduce new vocabulary
8. Use a story in a repetitive way to work on syntax
9. Track children who are having trouble following directions
10. Highlight the elements of a story (i.e. character, setting, problem, outcome)
11. Encourage classroom discussions about the story using visuals of story elements
12. Ask questions that reflect on how a child can relate to the story
13. Use guided reading as a time to work on re-telling narratives
14. Visualize parts of the story and create drawings about the story
15. Use illustrations from a story to build vocabulary
16. Pre-teach vocabulary in the book through use of smart board technology

The program was intended to provide opportunities for all children in a classroom to participate in story-telling events. Teachers were shown how to present stories using three general presentation styles: teacher presentation and students listening (presentation), teacher presentation + limited student participation (partial presentation), and full student participation (full participation). Descriptions of these three participation styles with examples are provided in Table 1.

Teachers were taught how to target the following phonological awareness and letter knowledge skills: rhyming, segmenting words and sentences, identifying sounds in words, and matching letters to sounds. These skills were often targeted in drumming sessions where rhythm and movement activities were embedded into routines. The program book "Sounds Abounds" by Lenchner and Podhajski (1998) was introduced as a resource. In addition, the teachers received cards through a private web forum with phonological awareness activities that they could incorporate into their lessons (ABC recipe, Khan Communications Inc.).

To facilitate teachers' understanding of how to use both narratives and phonological awareness activities in the classroom, the acronym DRUM was introduced. The DRUM model is illustrated in Figure 1. In the centre of the circle is the target of the learning task. The target could be phoneme segmentation, letter identification, or telling a story. The "Do" refers to getting children on their feet and involved in

Table 1. Participation styles presented as part of teacher in services associated with the FNMI-ELLI program

Presentation Style

- Read a story from a book
- Give the children something to listen for (i.e. problem)
- Highlight vocabulary to talk about after

Partial Participation

- The children are required to participate as story tellers
- Read parts of a sentence and stop to let the class finish the sentence (I.e. brown bear, brown bear what do you --------)
- Stop and ask the class questions: why do you think the gingerbread man keeps running away? (include predicting questions)
- Give the children roles (your job is to say "what do you see?")
- Ask the children questions after the story

Full Participation

- All children participate
- Children play characters and/or the set in a story
- Use of manipulatives: props, puppets (i.e. stick puppets)
- Children can be involved in making the manipulatives as part of a craft project

Visualization

- Read a highly visual with no pictures story (The Faraway Tree Stories by Enid Blyton was read to the teachers in the in-service)
- Encourage the children to create mental pictures of the story while listening to the story
- Have the children draw an element of the story after listening
- We added visualization after each story regardless of presentation style
- Ways to help a child visualize if they could not was demonstrated
- Use illustrations from a story to create vocabulary lists

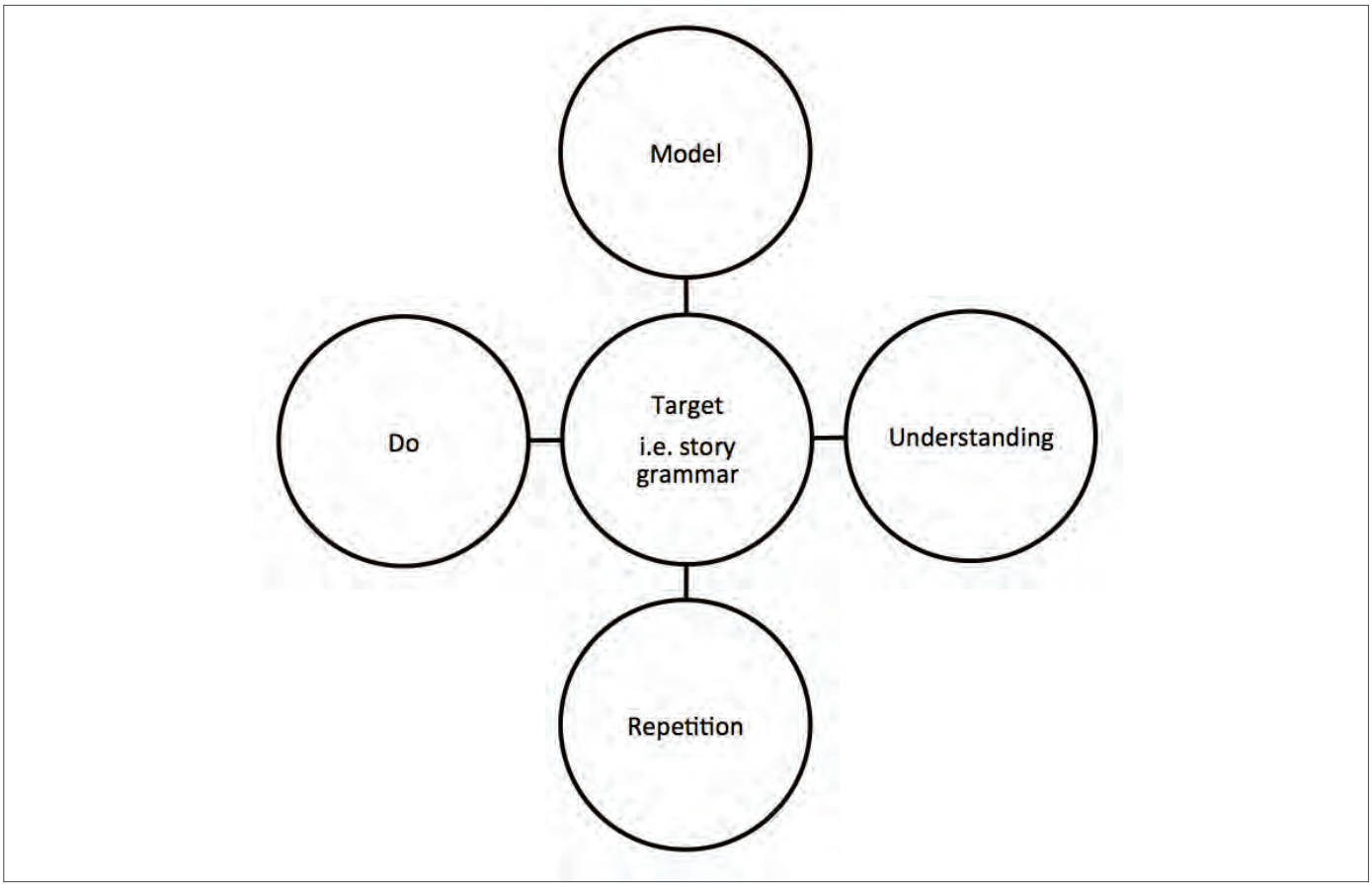

Figure 1. Elements of the DRUM model

the task, for example by acting out a story or stomping out the phonemes in a word. Repetition exposes the child to the learning task multiple times in the day. Repetition of the target can be built into activities and routines through visual, auditory, and kinesthetic modalities. For example, a teacher read a story from a book, acted out the story, and created some centres around the story to repeat the information and develop retelling skills. Understanding refers to extending the knowledge of the target to different contexts and relating the target to similar concepts and activities (e.g., telling about personal experiences related to a story plot, asking wh- questions about a story, identifying the same phoneme in the beginning, middle or end of words). Modeling is when we demonstrate the skill that we want the child to learn. In this regard, demonstrating the wrong (as well as the right) way of doing things was encouraged as a way to put the children in the role of "teacher". For example, showing a poor listening position for a story and having the children coach the teacher on how to be "ready" for the story. Another example would be to put appropriate affect into the story telling to model effective body language and voice quality.

The second teacher in-service was held in February, 2011. In this in-service, the data teachers collected was reviewed with teachers in each school as a group and goals were revised based on students' progress. If needed, teachers were given suggestions on how to collect data more frequently in the classroom.

The third teacher in-service was held in April, 2011. In this in-service teachers discussed the benefits and the challenges of the program. Further suggestions were provided by the speech-language pathologist on how to further incorporate program goals using strategies that were easily embedded in each classroom. An evaluation of teacher's impressions of the program was conducted at this time by the speech-language pathologist. At the School A, questions were presented to the group whereas at School B the questions were asked individually.

Classroom Demonstrations. The speech language pathologist demonstrated how to target goals in classroom activities three times during the school year. The purpose of these sessions was to demonstrate to teachers how speech and language goals relate to the classroom curriculum and how they can be targeted in general classroom routines with all the children integrated together in a repetitive, fun way. Strategies were demonstrated during daily lessons in kindergarten and Grade one classes. Elements of Métis and First Nation culture were incorporated into these sessions and teachers were encouraged to do the same. For example, during a drumming session focusing upon phonological awareness skills, the children moved to the syllables in words (e.g., ea-gle). Each time the drumming stopped, the children did an activity focusing on the last word (e.g., children made a statue of an eagle). Classroom demonstrations also focused on facilitating children's story comprehension and story-telling skills. The speech-language pathologist demonstrated how to encourage full participation from students. Decorative props were used as a way to incorporate different learning styles (i.e. visual, tactile, and experimental). Visualization of the story was also introduced as a strategy to increase comprehension, especially in children having difficulty processing auditory information. Tracking progress while a child presented a story was also modeled to the teachers.

Parent In-services. Two parent in-services were scheduled at each school in October, 2010 and April, 2011. The purpose of these workshops was to train parents on how to incorporate early literacy skills throughout daily routines in the home. The first parent in-service focused on reviewing the link between oral language and early literacy. In this workshop the speech language pathologist also helped parents develop a list of literacy activities to complete at home. The second in-service reviewed other elements of reading skills and language development (i.e. predicting, visualizing parts of a story, and sequencing), and how to target these skills in exercises at home.

Additional supports. Teachers consulted with the speech-language pathologist individually as needed using a private secured forum on the Khan Communication Services Inc. website. Each teacher logged in to obtain information and post questions for the speech-language pathologist. The speech-language pathologist provided regular updates on the forum including specific suggestions for each classroom.

As part of the program, teachers also met one afternoon without the speech-language pathologist to discuss how to connect the goals and strategies of the program to the curriculum. This meeting between the teachers proved crucial for developing support for the program. Teachers became more interested in participating and using the program and strategies when they were able to make direct links to the curriculum.

Evidence for Effectiveness of Program

As stated previously, only 11 children were pre- and post-tested by a speech-language pathologist using standardized measures. Eight of the 11 children had pre-test scores below age-level expectations in pre-test on the ENNI story grammar measure. Figure 2 presents individual standard scores, pre- and post-test results, for these eight children. The mean of the standard score for five year olds is 7.7 with a standard deviation of 2.78 (Child B and Child D). The mean for six year old children is 9.32 with a standard deviation of 1.46 (Children A, C, E, F, G, H). [Note that the children remain consistent in all of the graphs; that is, Child B is the same child in every graph.] The results show a substantial increase in all eight children's ability to formulate a narrative from pictures using the story grammar elements modeled in the intervention. Child F and Child H were the two children with diagnosed language impairments; both improved in their story grammar scores over the year (although some of this improvement for Child F may have been from daily speech therapy to improve intelligibility). Figure 3 shows the results of teachers' in class evaluations of story grammar abilities using the criterion-referenced measure presented in Appendix A for the same seven out of eight children (One child is missing due to lack of data from one teacher). Once again, all seven children showed gains on this measure.

Three of the 11 children being followed longitudinally did not have pre- and post-test measures for story grammar because their pre-test scores on the ENNI were within the average range and therefore narrative abilities were not an identified goal for them. Therefore, data for these three children are not presented in Figures 2 and 3. These three children did experience difficulty with phonological awareness tasks in pre-test, however, and their data are presented along with the other five children who scored low at pretest on the phonological awareness tasks in Figure 4a and b. Figure 4 a and b presents percentile rank scores on the *Rhyming Identification* and *Rhyming Production* subtests of the *PAT* for eight children. According to the *PAT*, a percentile rank of 16 or less indicates a performance that is below age-level expectations. The highest percentile achievable is 80. Four of the eight children improved in their ability to identify and produce rhymes. Two additional children identified rhymes within normal limits at pretest and post-test, but improved in their ability to produce rhymes over the period of the intervention. All six children

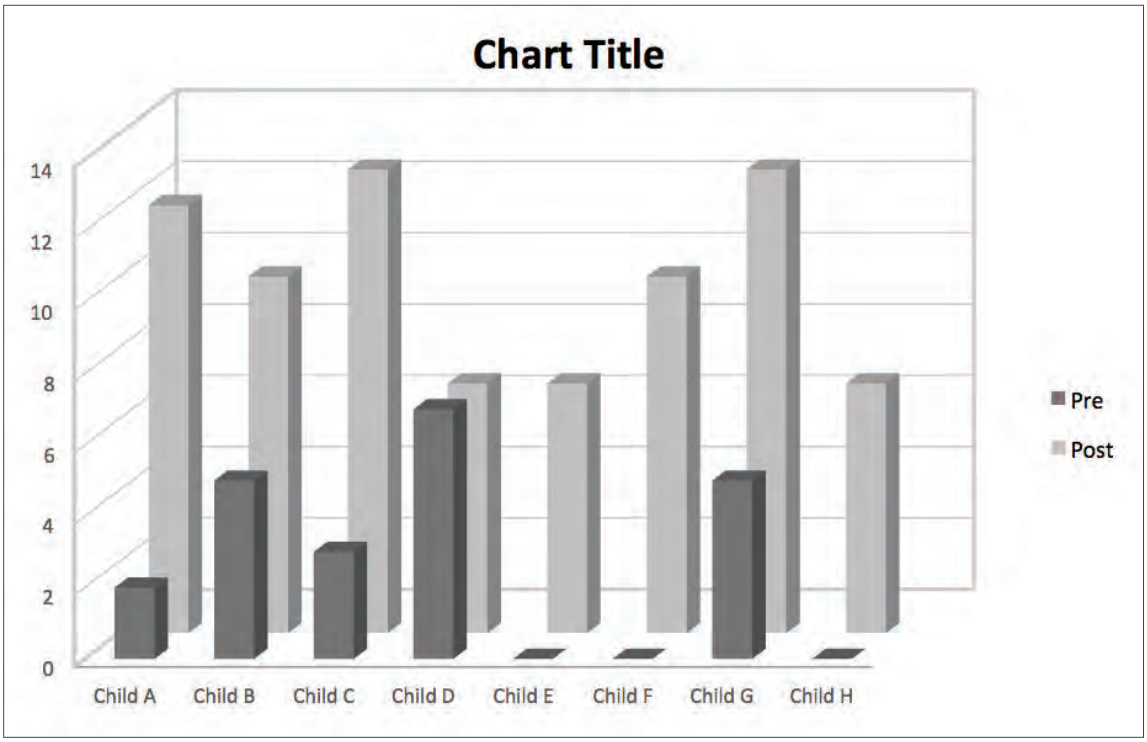

Figure 2. Pre- and Post-test ENNI story grammar scores (n = 8).

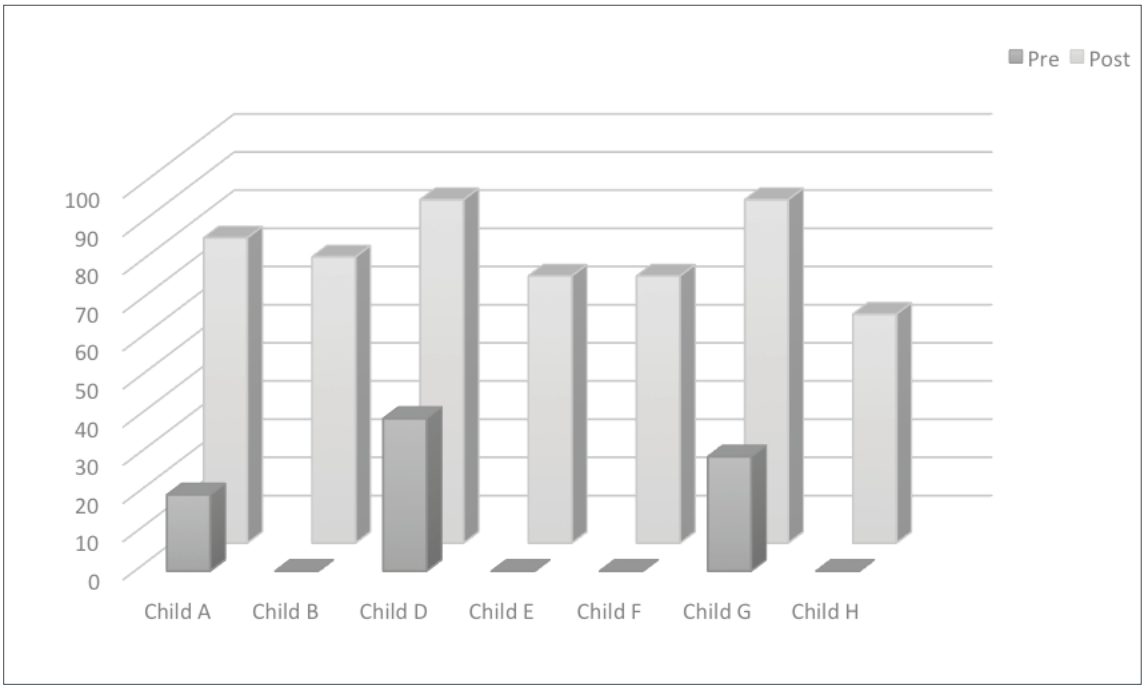

Figure 3. Pre- and post-test scores on a criterion-referenced measure of story grammar completed by the classroom teacher (n = 7).

who made progress in phonological awareness skills, measured using these rhyme tasks, achieved scores within the normal range at post-test on both the rhyming identification and producing tasks. Two children, Child F and Child H did not improve from pre-test to post-test on either rhyming task—these were the two children with diagnosed severe expressive language delays.

Teacher Participation and Feedback

Each of the nine participating teachers had a different comfort level with administering the program. Two of the nine teachers stated that they were not comfortable with facilitating story re-enactments in the classroom. One of these teachers did not perform any story re-enactments during the year and the other asked another staff member

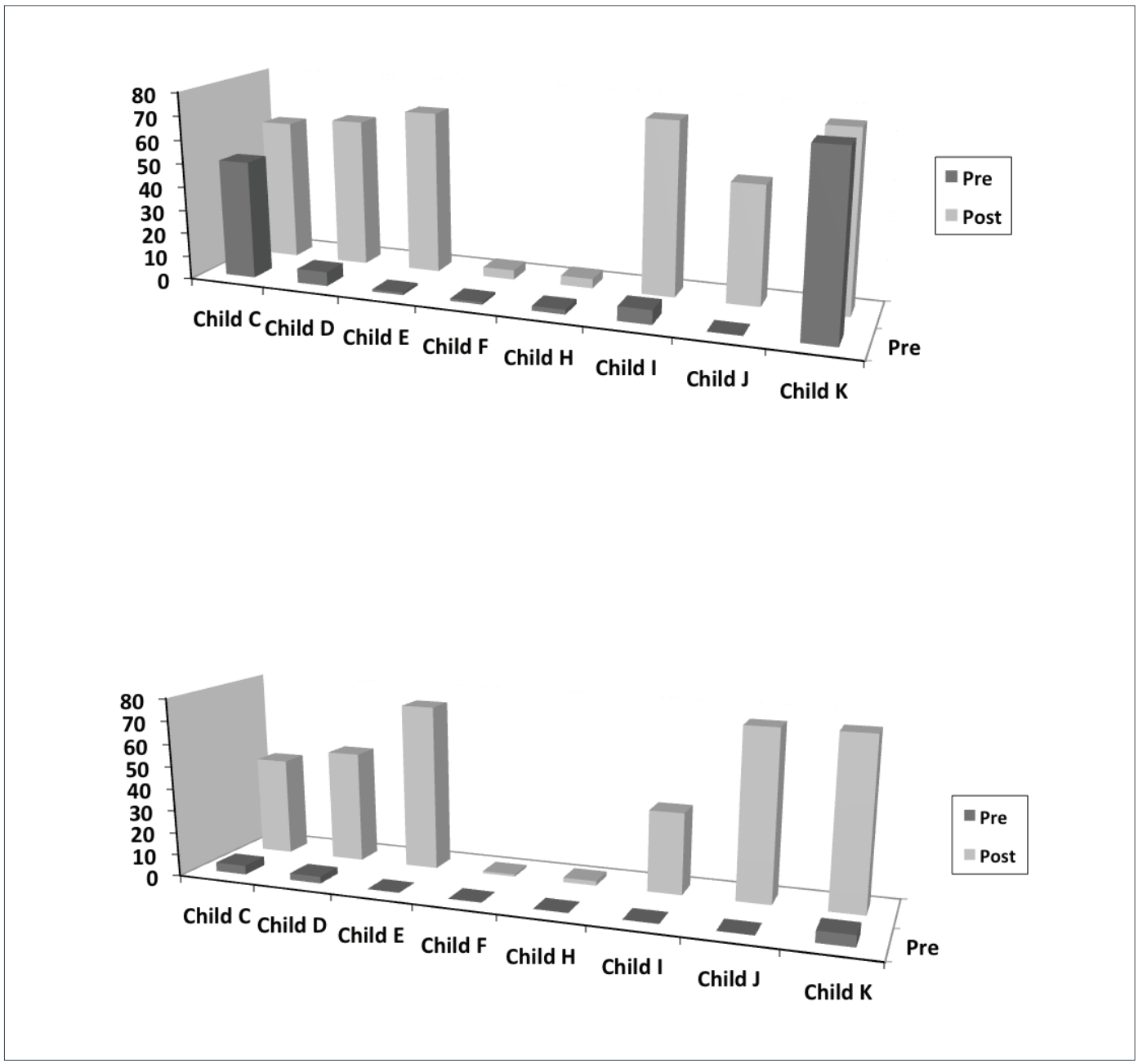

Figure 4 a, b. Pre- and post-test percentile ranks on Rhyming Identification and Rhyming Production subtests of the *PAT* (n = 8).

to lead story-retellings. All teachers were involved in data collection except one who collected only at the end of the year. Also, some teachers tracked progress with greater frequency than others. The speech pathologist noted through discussions that some teachers needed more encouragement and guidance regarding the importance of developing narrative skills and relating these skills to the classroom curriculum. Others appeared to understand the relationship readily. Selected teachers' responses to the questions asked in the third in-service are presented below.

1. What were the joys of participating in this project?
    - Challenged higher levels – weren't bored
    - Seeing student progress in phonological awareness skills and story retelling
    - Giggles – student enjoyment
    - Kids surprise you – got really involved in re-tells
    - Seeing the confidence build
    - Brought a more cognizant focus to the FMNI children in the class
    - More aware of cultural and linguistic differences
    - Attendance of FMNI parents to the parent night
2. What were the challenges?
    - Student absences and late attendance at school
    - Trying to balance all activities
    - Gathering the props
    - Keeping students with props on task
    - Re-telling without the visuals
    - Helped when the connection to curriculum was made
    - Taking data
    - Maintaining the approach throughout the year
3. What are the advantages of a multi–modal approach to the whole class?
    - More props (auditory and visual) = more engagement
    - More movement
    - Catches all levels of learners
    - Increases imagery
    - Engagement in learning, memory, and enthusiasm

The FNMI project is continuing and is currently in its fourth year. Some changes regarding program implementation have been observed over time. In the first year of the project, teachers reported that it was a challenge to collect data. However, by the second year of the program the same teachers reported feeling more confident collecting data and implementing the program activities. In the fourth year, data collection was demonstrated with more explicit cuing instructions (when does a child's comment count as independent?).

Each teacher has incorporated ideas from the program into their own teaching styles. For example, one kindergarten teacher has incorporated technology by using the app "Pictello" into the intervention approach. Children illustrated the beginning, middle, and end of a story. Then they recorded the story with the pictures using the Pictello on the iPad. The story was then played on the smart board for the entire class while the teacher was able to mark the story grammar units. This teacher improved in her ability to collect data on children's story telling abilities over the two years of the program.

Discussion

The goal of the FNMI-Early Literacy and Language Enrichment program was to provide participating children with enriched language experiences that allow them to attain the readiness skills required to meet curriculum expectations without removing them from the classroom. The language skills focused upon were narrative and phonological awareness skills. The goals and many of the strategies introduced in the classroom-based intervention program are used by speech pathologists in inclusive settings and are related to later academic success and literacy skill development.

The data presented in this article are preliminary at best and establishing the effectiveness of the program awaits more rigorous methods. Nonetheless, the pre-post ENNI scores demonstrated that some children improved their narrative and phonological awareness skills after participating in the program for one school year. What is not clear is whether the improvements can be directly attributed to the program they experienced. Maturation and the impact of other activities in the classroom may account for the changes observed. In the future, it will be important to study the effectiveness of this program more rigorously with a larger number of children and with an age-matched comparison group that does not receive this intervention.

The participating teachers commented that they benefited from the project. Some of these benefits appear

important, for example the reported ability of teachers to incorporate story-telling and phonological awareness activities into the classroom setting. To this end, it appeared that teachers appreciated being provided with time to meet together to discuss curriculum connections with the program. This part of the program may have helped teachers to consolidate the link between narrative and phonological awareness activities and curricular expectations.

The program was delivered in the classroom. Classroom based interventions that do not single out individuals who are experiencing difficulty are considered particularly beneficial and suitable for children of Aboriginal backgrounds (Crago, 1992). In addition, the use of oral narratives, whole class learning, and experiential learning—essential parts of the program—have been identified as culturally relevant practices for First Nations and Métis students (Ball, 2007). Several teachers mentioned that they became more aware of the First Nations and Metis children in the classroom. They felt that they checked in more often with these students. Therefore the conversation around First Nation education provided through the program may have led to more individual attention of First Nation and Metis children in the classroom and sensitivity and incorporation of aspects of Aboriginal culture into the curriculum.

Future Directions

The FNMI Language Enrichment and Phonological Awareness Program was initiated by a School Division in northern Alberta to provide kindergarten and Grade 1 students with language enriched programming in their classrooms so that all children might have the opportunity to enhance their pre-literacy skills. In order to determine if this program leads to reading success, reading measures of students in the program should be compared to peers not receiving the intervention over time. As the program expands, such additional data will be collected.

At the end of year one, teacher evaluations indicated that teachers felt the role of the speech-language pathologist was of great importance, and they requested an increase in the number of classroom demonstrations. At the time of this writing, the school division had increased this part of the program to four demonstrations per year, and it is expected that participation of the speech language pathologists in the classroom will continue to increase over time.

In the first year the program used stories that were based on a Euro American sense of story elements. By the second year stories from First Nations and Métis cultures such as "The Beginning of Creation" by Anderson (1982) and the "Jingle Dancer" by Leitich Smith, Van Wright, C., & Ying-Hwa (2000) were included in the program. As the program expands, more activities and stories from First Nation and Métis communities will be included.

Conclusion

A whole classroom approach to language development and literacy using repetition, experiential learning, oral language, and shared experiences was implemented. Preliminary findings suggest that this approach was embraced by teachers and enjoyed by students. Future studies will examine its effectiveness in providing a means for developing narrative and phonological awareness skills for all children in a class, including those at risk and those with language impairments.

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APPENDIX A

Retelling Scoring Form

Name: _____

A check mark demonstrates independent proficiency
Note: Open ended prompts are not counted as a prompt (i.e. And then what happened)
P – required prompting
AQ – had to be asked the question

Elements	Prompts	Date: Title:	Date: Title:	Date: Title:	Date: Title:	Date: Title:	Date: Title:
Beginning	Mentions initial event. How does the story begin?						
Setting	Mentions setting. Where does the story happen?						
Characters	Mentions one character (not a pronoun)						
	Mentions another character (not a pronoun)						
	Mentions feelings of character. How did that make him feel?						
Problem	Mentions problem. What is one important problem in the story?						
	Referents are clear (pronouns used are easy to follow)						
Middle (Sequence)	Mentions one other event (in sequence)						
	Mentions an additional event (in proper sequence)						
End	Mentions the outcome. What happened at the end?						
Level of Prompting	High Medium Low Total	____	____	____	____	____	____

Interpreting the Points	
8-10 - Skilled	Complete, Detailed – Good thorough Retell
5-7 - Developing	Partial Retell - A few more details would make it easier to follow
0 – 4 – Needs Work	Retelling Very Difficult to Follow, Inaccurate or Unwilling to Retell a Story

The Hearing and Otitis Program: A Model of Community Based ear and Hearing Care Services for Inuit of Nunavik

Le programme Otite et Audition : un modèle de services de soins de santé auditive pour les Inuit du Nunavik

Isabelle Billard

KEY WORDS

HEARING IMPAIRMENT
INUIT
OTITIS MEDIA
AUDIOLOGY
COMMUNITY BASED REHABILITATION
NUNAVIK

Abstract

More than 20 years ago, Crago, Hurteau and Ayukawa (1990) described in detail the foundation of the project for Hearing Impaired Inuit of Northern Quebec (HIINQ), designed to offer culturally based audiological services to the population in an area now known as Nunavik. From the middle to the end of the 1980s, during the first phases of the project, services transitioned from being Montreal-based and delivered by southern professionals to Northern-based services provided by trained Inuit hearing specialists. The change in focus targeted the empowerment of the Inuit in their own ear and hearing health care and the provision of audiology services that are culturally and linguistically appropriate.

Today, the project, now known as the Hearing and Otitis Program (HOP), has evolved, facing old and new challenges and audiology services, despite different models of delivery, having been maintained in the North. While standard hearing evaluation still has its place in the program, activities also tend to be oriented towards community based rehabilitation services.

This article aims to give a description of the program, its model of service delivery, the role of the different contributors to the program, and its challenges and proposes avenues to explore in order to maintain and enhance the community based aspects of the program.

Abrégé

Il y a plus de vingt ans, Crago, Hurteau et Ayukawa (1990) décrivaient en détail un projet destiné aux Inuit malentendants du Nord du Québec (HIINQ - Hearing Impaired Inuit of Northern Quebec). Ce programme a été conçu pour offrir des services d'audiologie adaptés à la culture de la population vivant dans une région maintenant connue sous le nom de Nunavik. Vers la fin des années 1980, pendant la première étape du projet, les services sont passés d'une prestation basée à Montréal par des professionnels du Sud à des services basés dans le Nord par des Inuit ayant reçu une formation comme spécialistes de l'audition. Ce changement visait la prise en charge par les Inuit de leur propre santé auditive ainsi que la prestation de services d'audiologie culturellement et linguistiquement adaptés.

Aujourd'hui, le projet, connu sous le nom de Programme Otites et Audition (*HOP – Hearing and Otitis Program*), a évolué, faisant toujours face à différents défis, peu importe les modèles de prestation de services. Par ailleurs, le modèle actuellement en cours maintient toujours l'idée d'offrir des services basés au Nord. Le programme compte à la fois des services d'évaluation auditive individuelle ainsi que des activités de nature communautaires.

Le but de cet article est de décrire le programme, ses modèles de prestation des services, le rôle des différents membres de l'équipe ainsi que les défis à relever. Il vise également à explorer différentes avenues afin de maintenir et améliorer sa vocation communautaire.

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Introduction

Hearing loss among the Inuit population has been well documented over the past decades (Baxter, 1977; Baxter & Ling, 1974; Julien, Baxter, Crago, Ilecki, & Therien, 1987). Depending on the study, it has been established that 19 to 25 % of school-aged children have a significant unilateral or bilateral hearing loss, mostly due to ear infections, as compared to 10 % of hearing loss in non-Inuit children (Ayukawa, Lejeune, & Proulx, 2004; Julien et al., 1987). Otitis media (OM) in Inuit children has been the primary focus of research (Ayukawa, H., Bruneau, S., Proulx, J. F., Macarthur, J., & Baxter, J. (2004); Baxter, Julien, Tewfik, Ilecki, & Crago, 1986). In adults, the Nunavik Inuit Health Survey of 2004 explored the prevalence of hearing loss and found 25 % of adults were suffering from hearing loss in one or both ears. It also found that by the age of 45, 75% of Inuit male adults experience significant hearing loss, predominantly due to noise exposure (Ayukawa, Bélanger, & Rochette, 2007).This prevalence increases with age. As a comparison, in the general population, at age 65, only 33% of adults present a hearing loss. Therefore, the prevalence of hearing impairment in Nunavik itself justifies the existence of audiology services, targeting not only children but the whole population.

Prior to 1985, Inuit children and adults in Nunavik, in need of audiology services or hearing aid fitting, had to travel to Montreal where they would have very limited services in their own language. For these individuals, no follow-up was planned after their hearing aid had been sent by mail to their community. In the late 1980s, a project called the Hearing Impaired Inuit of Northern Quebec (HIINQ) drafted the basis for audiological services that were more appropriate to the Inuit population of the northern part of the province (Crago, Hurteau, & Ayukawa, 1990). The goals were to reduce the negative effects of otitis media while empowering Inuit in the provision of ear and hearing health services. In order to achieve these goals, audiology services were transferred from Montreal to the North and training of Inuit hearing specialists was offered so they could provide basic services to their community. One of the major outcomes of this project was that sustainable funding from the Ministry of Health and Social Services was given to guarantee continuity of the services. Now known under the name of Hearing and Otitis Program (HOP), the program offers primary ear and hearing care in Nunavik and makes ongoing efforts to ensure its adequacy and congruency with the cultural and linguistic aspects of Inuit lives.

General context

Geographic and demographic considerations of Nunavik

Nunavik is the northernmost region of the province of Quebec, a territory located above the 55th parallel and covering about one third of the province's surface. Fourteen villages are scattered along the coasts of the Hudson Bay, the Hudson Strait, and the Ungava Bay. Nunavik stretches from 1500 to 2500 kilometers North of Montreal. (Makivik Corporation, 2012). Since there are no roads connecting the communities or southern cities all health-related travel is done by airplane. The number of inhabitants in the different villages range from approximately 200 to 2400 for a total of 12 000 people in the area (Ministère de la culture et des communication, 2012). Thirty-four percent of the population is under 15 years-of-age and the life expectancy is 66 compared to 81.8 in the general population of Quebec (Payeur, 2012).

Culture and language

More than 95% of the population of Nunavik is of Inuit ancestry. Major changes occurred in their traditional ways of life when, in the 1950s, during the Cold War, the Canadian government created communities where Hudson's Bay trading posts already existed. In order to establish its sovereignty throughout the northern part of Canada, the government sent nurses, administration clerks, and police services. Inuit were strongly encouraged to settle in these new villages leaving their nomadic lives. Since then, the population has continued to face ongoing challenges, rapidly adopting southern Canadian lifestyle while practicing traditional activities such as fishing, hunting, camping, and berry picking.

Inuktitut is the language spoken in most aspects of people's lives, whereas English and French are mostly used for communication between Inuit and non-Inuit.

Education

Overseen by the Kativik School Board (KSB), northern schools offer primary and secondary classes (Kindergarten to grade 12). From Kindergarten to grade 3, schooling is in Inuktitut and from grade 4 teaching is given in either French or English, according to parents' preference. Inuktitut continues to be taught throughout the student's curriculum. According to Nunavik Regional Board of Health and Social Services (2011), 10% of people residing in Nunavik aged 25 to 64 have a high school diploma, 30% have a post-secondary diploma below a bachelor's degree, and 10% have a university degree. Very few post-secondary degrees are completed in a health-oriented discipline. An itinerant non-

Inuit speech-language pathologist is hired by KSB to support the work of the special education teachers.

Medical services delivery

Health services in Nunavik are under provincial jurisdiction through the Nunavik Regional Board of Health and Social Services. This organization is also responsible for managing subsidies from federal programs targeting needs in native communities like mental health, prenatal nutrition, family violence, and child development.

There are two hospitals in Nunavik, one on each coast, offering short-term, long-term, and specialized medical care to Nunavik residents. The Inuulitsivik Health Center in Puvirnituq delivers services to the Hudson Bay residents from Kuujjuaraapik to Salluit and the Tullatavik Health Center in Kuujjuaq offers services to the residents from Kangiqsujuaq to Kangiqsuallujuaq in Ungava Bay. Professional services such as laboratory, pharmacy, dental care, radiology, and rehabilitation are provided in each hospital and those departments ensure access to the different communities through nursing stations by air mail or regular visits.

In Quebec, those nursing stations are called CLSCs (from the French: Centre local de services communautaires or local community services centers). They are the entry to both preventive and curative care and are present in each community. Nurses offer immunization services, well baby clinics, follow-up of different physical health problems, and deal with emergencies. In remote areas such as Nunavik, nurses have an enlarged role and are able to prescribe certain medications following therapeutic guidelines. There is also a program aiming at giving home care called PLA program (for People in Loss of Autonomy)

There are four communities of more than 1000 people in Nunavik: Puvirnituq, Salluit, Inukjuak, and Kuujjuaq and each has one or more full-time doctors. Other communities receive monthly visits from doctors holding full-time position in the hospital of Puvirnituq or Kuujjuaq.

Hospitals and CLSCs receive a range of visiting medical specialists. Some, such as paediatricians, ear nose and throat (ENT) physicians, and ophthalmologists travel to each community while others like gynecologists, orthopedists, and psychiatrists visit only larger communities. Patients in need of an appointment have to fly and usually stay overnight to these centers in order to benefit from their services.

Patients requiring more urgent and complex services are transferred to Montreal where the Northern Quebec Module has the mandate to coordinate patients' visits in health institutions in the South as well as offering transport and lodging while accessing those services.

Audiology services in Nunavik

Community based model

In an area such as Nunavik where communities are isolated and the cost for travelling by plane is highly prohibitive, health programs need to be planned in order to offer the best access to services while being financially sustainable. The World Health Organization (WHO) has developed an expertise for research and program-development in areas of the world facing, to different degrees, similar issues. The development of audiology services in northern Quebec was highly influenced by their approaches.

From the mid-1970s on, health policies in developing countries and remote regions moved away from a specialized and centralized approach to a community based model, revolutionizing provision of health services by training local people to give basic health services within their communities (Black, 1986). The 1975 recommendations of the UNICEF/WHO Joint Committee on Health Policy were key concepts on which the HIINQ project and its structure were originally conceived (Crago et al., 1990). Today, the Hearing and Otitis Program in Nunavik has maintained its commitment to this approach by giving ongoing training to Inuit hearing specialists without depending exclusively on visiting audiologists or hearing instrument specialists (HIS), and without having patients travelling South for services.

Community based rehabilitation (CBR), which emphasizes inclusion and participation of people with disabilities has started to influence health services provision since the mid-1970s (Black, 1986). Within this framework, the World Health Organization (WHO) has more recently given specific attention to hearing problems and ear and hearing care. Here is how the WHO (2012) describes the roles of CBR specific to this matter:

- Advocate and campaign for ear and hearing health services at all levels of health care;
- Facilitate access to ear and hearing health care services for all members of the community and promote the prevention of avoidable causes of hearing loss;
- Create public awareness of all aspects of hearing loss;
- Raise awareness in schools and within education systems of the need to include children and adults with hearing loss;

- Promote and provide accessible communication for those with hearing loss;
- Ensure that people with hearing loss receive the necessary attention at times of humanitarian crisis and that their needs are considered in all disaster preparedness initiatives;
- Ensure that individuals with hearing loss have access to education and training programs that may lead to employment;
- Include people with hearing loss in the decision-making processes that affect their lives;
- Encourage society to ensure that people with hearing loss are included in social groups and community events.

Some activities of the Hearing and Otitis Program are already in phase with this model, providing information to the population through different means of communication. Activities of prevention of ear and hearing problems take place at school as well as with high risk groups such as daycare children and hunters. Information about issues such as prevention of otitis media (OM), noise-induced hearing loss, and development of normal hearing behavior are also transmitted through FM radio to connect to a broader audience as it is a widely used means of community communication.

Roles of the different members of the Hearing and Otitis Program

In order to better understand the way services concerning ear and hearing care are provided to the Inuit population of Nunavik, it is essential to clarify the role played by the different members of the HOP. The role of the members is essentially similar on both coasts, but some regional disparities exist in terms of service delivery models, as shown on Table 3.

There is no registered Inuit audiologist or hearing instrument specialist in Quebec Therefore, in the descriptions below, those professionals as well as the coordinator are non-Inuit.

Inuit involved in the program have two different roles: the *siutilirijiit*[1] and the *aaniasiurtiapiit*.

The *siutilirijiit*

Central to the activities of the HOP are the *siutilirijiit*, meaning "the ones who know about ears". Their role essentially lies within what SAC describes as the scope of practice of supportive personnel in audiology (SAC, 2013, p.3) as shown on Table 1. In this table, it is said that it is possible that supportive personnel also "assist the Audiologist with communication with patients/clients when there are language differences in which the Supportive Personnel is competent". The *siutilirijiit* can often play the role of cultural counsellor, allowing acceptable responsiveness, both linguistically and culturally, to the proposed solutions offered to hearing impaired Inuit in terms of prevention or rehabilitation.

Siutilirijiit are selected for their sense of initiative, organizational skills, ability to communicate verbally in English (or French) and Inuktitut, and being respected by the community. Many *siutilirijiit* have had either personal or professional experiences with hearing impairment, and therefore are able to share their own experiences with the population they serve. For example, one worked previously with a Deaf child in school, another had a Deaf child, another had a progressive hearing loss and wore hearing aids and many others had experienced otitis media either themselves or with their children.

The *aaniasiurtiapiit*

In their recommendations, Crago et al. (1990) suggested that Inuit hearing specialists should be trained for each community. On the Hudson coast, in each community, an *aaniasiurtiapik* ("little nurse") acts as the local resource person for the audiology program by being the principal link between hearing impaired persons in his/her community and the other actors of the program. As full-time or part-time interpreters/health workers at the CLSC, the *aaniasiurtiapiit* usually volunteer to assist the HOP team. It was agreed by the administration of Inuulitsivik Health Center in Puvirnituq that the HOP budget would recognize the contribution of the time the *aaniasiurtiapiit* spends for the HOP which also means that during the HOP yearly visits, the administration would allow the *aaniasiurtiapiit* to be replaced by another interpreter while they assist the team.

The role of the *aaniasiurtiapiit* is described in Table 2. Because they are the primary contact with the population, they are soon recognized as the community leader of "ear matters". As an example, a hearing aid user with a broken device would usually first go to see the *aaniasiurtiapiit*, who would do a visual and listening check, and try to make minor repairs. If these were not effective, they would either contact the HIS of the team for help or send the hearing aid for repair by mail. As for the other duties, the *aaniasiurtiapiit* are also involved in screening at school and work together with the audiologist and the *siutilirijiit*, in prevention activities. Finally, because they have good knowledge of their community, *aaniasiurtiapiit* are responsible for making appointments during audiologist's visits. This task alone can be challenging for an outsider of the village since many

Table 1. Scope of practice of supportive personnel in audiology as described by SAC (2013)

- Assisting with hearing screening programs for all ages.
- Screening and basic test measures such as otoscopy, immittance, oto-acoustic emissions, pure tone air and bone conduction, and basic speech testing.
- Assisting patients or clients in completing case history and other relevant forms.
- Reporting and documenting patient or client information, observations regarding behaviours, and ability to perform tasks to the supervising audiologist.
- Assisting the audiologist with testing difficult-to-test patients or clients.
- Assisting the audiologist during assessments. This may include assisting with electrophysiological assessments and vestibular testing.
- Assisting the audiologist with formal and informal documentation, preparing materials, and performing clerical duties.
- Conducting electro-acoustic analysis of hearing aids and FM systems.
- Providing listening checks and troubleshooting hearing aids, FM systems, and other assistive listening devices.
- Troubleshooting issues with, conducting minor repairs for, and cleaning hearing aids.
- Demonstrating and orienting patients or clients to assistive listening and alerting devices.
- Making earmold impressions.
- Making earmold modifications and shell modifications.
- Educating patients or clients regarding hearing protection devices (e.g., earplugs), prevention of noise-induced hearing loss, and proper ear hygiene.
- Assisting with departmental operations, e.g., scheduling appointments, preparing charts, collecting data, documentation, safety procedures (including infection prevention and control), maintaining supplies and equipment, and operating audio-visual equipment.
- Maintaining, troubleshooting, and performing basic calibration checks of equipment.
- Assisting the audiologist with research projects, in-service training, and family or community education.
- Assisting the audiologist in communicating with patients or clients when there are language differences and the supportive personnel is competent in the patient or client's language.
- Assisting the audiologist in the installation of sound field amplification systems (e.g., classrooms, meeting rooms).
- Attending case conferences with a supervising audiologist.
- Teaching courses within a supportive personnel training program as long as the course content is related to professional roles, responsibilities, and issues of supportive personnel. The course content must be approved by an S-LP or audiologist involved in the training program.
- Assisting with student training and practicums.

Table 2. Role of the aaniasiurtiapik

- On-going services to the hearing impaired as needed.
- Cultural and linguistic advice
- Hearing screening in students
- Hearing aid user follow-up
- Hearing aids management and minor repairs
- Active participation to the HOP team visit
  - Appointments
  - Medical files
  - Participation in testing
  - Participation in public health activities (at school, FM radio, with hunters)

Table 3. Regional disparities in the composition of the HOP team between the Hudson and Ungava coasts of Nunavik.

	Hudson	Ungava
Aaniasiurtiapiit	• One in each community except Puvirnituq • Part-time or full-time interpreter/ health worker at the CLSC • Recognized as being part of the HOP team and can assume their HOP duties (screening a school, assist at the time of audio visit, etc.) while being replaced in their position.	• None
Siutilirijiit	• 1 full time position + occasional replacement travel to communities at time of audiologist's visit • Assume office services outside these periods	• 1 full time position based in Kuujjuaq + 2 occasional replacements based in Kangirsuk • Travel to communities for screening sessions and at time of audiologist's visit
Audiologists	• 6 part time itinerant professionals employed by the Inuulitsivik Health Center • Each audiologist is assigned to one community • Two visits a year, one or two weeks/ visit depending on community size	• 1.4 full time position employed by the Tullatavik Health Center • Based in Kuujjuaq • Two visits a year to the six communities other than Kuujjuaq

Coordinator	• Audiologist employed by the Inuulitsivik Health Center 1 day/week • Based in Montreal at the Northern Quebec Module • Occasional visits to Puvirnituq (training or other coordination tasks)	• None since there is on-going services
Hearing instrument Specialist	• Visits all communities once or twice a year	• Visits all communities once or twice a year

Table 4. Evolution of audiological service delivery on Hudson and Ungava coasts of Nunavik.

Hudson Coast	Ungava Coast
Before 1985 no services up North	
Between 1985-1994: One audiologist based first at McGill School of Communication Disorders and at the Montreal Children Hospital (MCH); provided services to both coasts once a year	
In 1994, the Inuulitsivik Health Center decided to bring services up North; until 2003, one full-time audiologist was on contract for 8 months/yr based in Puvirnituq and travelling from there to the six other communities of the coast.	At the same time, the audiologist for Ungava remained based at the MCH on a 0.8 position with annual visits to the seven communities of the Ungava side
From 2003 to 2008, audiology services became more unstable; often temporarily transferred to Montreal; difficulty in recruitment brought reconsideration of the model of service provision.	In 2006, the audiologist moved to Kangirsujuak and the position became full-time.
Since 2008, there is a team of six audiologists, each of them enrolled as Inuulitsivik employees are assigned to one or two communities which they visit twice a year; when not up North, have established professional practice in either public or private setting; a coordinator of this team is based in Montreal at the MNQ office.	Since 2011, a second audiologist joined the team and both are now based in Kuujjuaq for a total of 1.4 FTE.

Table 5. The content of basic training of the Inuit hearing specialists

- Information on the Hearing and Otitis Program
- CLSC Local Resources Job Description
- Anatomy and physiology of the ear
- Hearing
- Otoscopy and Otitis media
- Hearing evaluation
- Hearing loss
- Hearing screening
- Counselling on hearing loss and hearing aids
- Public education and prevention of hearing problems

Nunavik residents are known by more than one name, do not have phones or frequently change their phone number.

The audiologist

Audiologists are hired as part-time (Hudson) or full-time (Ungava) employees of the main hospitals. On the Ungava coast, the full-time audiology position has been maintained up North since 2006, while on the Hudson side, a team of six audiologists, all based in the South, offer services to the seven communities. Each audiologist visits one or two villages twice a year for one to three weeks at a time.

The delivery model of services provided by successive audiologists working for the program has evolved over the years (Table 4). Until 1994, one audiologist covered all 14 villages, but since that time, service provision has been organized separately on the two Nunavik coasts. Overall, efforts were made to guarantee the communities as much continuity as possible in regards to the professionals involved. The role of the audiologist is to bring specialized expertise within the different activities of the program and through direct services to the population. They are responsible of the completion and interpretation of hearing evaluations including patient's needs for rehabilitation services, amplification, and assistive listening devices. In collaboration with the *siutilirijiit*, the audiologists are involved in the choice and the orientations of community based actions and appropriate means of prevention and transmission of information. Audiologists are also advocates for patients' needs in terms of specialized services offered outside the communities such as bone anchored hearing aids (BAHA) or cochlear implants (CI). They may get involved in research or data collection when needed.

Audiologists also give on-the-job training to the Inuit hearing specialists. In this way, audiologists ensure the maintenance of an adequate level of knowledge and skills so those workers can respond in an efficient manner to the community's needs.

The hearing instrument specialist

The only member of the team not hired by one of the Nunavik hospitals is the hearing instrument specialist (HIS) who is under contract with both hospitals for a period of 3 years. Based in the South his/her role is to sell hearing aids, to provide follow-up care to hearing aid users, and to make adjustments to hearing aids if necessary as well as to take ear impressions for molds. Also, in order to maintain the knowledge and skills of the Inuit hearing specialists, he/she allows time at each visit to give ongoing training. He/she visits all communities of Nunavik at least once a year.

The coordinator

On the Hudson coast, the position of HOP coordinator was created in 2008 to ensure continuity of audiology input to the program while the clinicians are not on the coast and to be the bridge between visiting audiologists, the siutilirijik, the *aaniasiurtiapiit*, the HIS, and other medical partners of the program in the communities or in the South. The tasks of the coordinator, apart from the basic organization of the

visits (reservation of planes tickets and lodging facilities) are to offer continuing education opportunities to Inuit partners as well as to the audiologists of the team. Also, because the audiological equipment travels continuously, the coordinator makes ongoing efforts to ensure the professionals have adequate and functioning tools to complete their work. Finally, he/she is responsible for the recruitment and orientation of new staff in the program. Occasionally, he/she provides assistance to Inuit hearing impaired patients in transit to Montreal for medical services. The coordinator is in a strategic position to facilitate the transition from ear and hearing interventions done in Montreal and the follow-up in the North.

Training Inuit hearing specialists

While *siutilirijiit* and *aaniasiurtiapiit* are mostly trained on-the-job, some more formal training sessions are organised, gathering workers from both coasts when there is a sufficient number of new participants in the program and when there is available funding. Usually all *aaniasiurtiapiit* and *siutilirijiit* are invited to these sessions, giving an opportunity for more experienced workers to share their knowledge and help the newer members of the team gain technical skills. These training sessions take place up North in one of the larger communities, where facilities like a conference room and lodging are more easily available. The basic training program is an updated version of the training manual described in Crago et al. (1990) (see Table 5).

Training is offered either by audiologists, senior Inuit hearing specialists, or other collaborators such as the hearing instrument specialist. More advanced training has been occasionally offered to senior *aaniasiurtiapiit* and *siutilirijiit* on specific topics such as noise-induced hearing loss or tinnitus management.

Challenges of service provision

Turnover of staff

The main challenge the HOP has faced in maintaining the services is the turnover of staff, Inuit and non-Inuit. Turnover has an important negative impact on the efforts dispensed and added expenses required for ongoing orientation and training. But most of all, turnover compromises the capacity to build relationships. As reported by Ball and Lewis (2011), it is essential to develop trust with members of the community, people who will be colleagues as well as patients.

Also, experience has shown that when a full time audiologist leaves the program, it is difficult to recruit a new professional, hence leaving the population without any specialised services for sometimes one year or more.

Model of service delivery

Both coasts have experienced having audiologists based in the North and based in the South. The two situations offer advantages and challenges. A full-time position based in the North provides many opportunities to discover the culture of the Inuit and to more clearly understand the reality of the people the audiologist serves. It may also facilitate the building of closer working relationships with Inuit hearing specialists. On the other hand, while the job ideally requires experienced audiologists, it is often hard to find experienced professionals willing to leave an established practice, family, friends, and easy access to a diversity of products and services to live for extended periods in the North.

In the service delivery model on Hudson coast, when not travelling on community visits with the audiologist, the siutilirijik works mostly alone. However, this is not how Inuit typically like to work, preferring collaboration to working alone. It may have consequences on their motivation to attend work. Experience has shown that being in such a key position, on which the organisation relies, places a lot of pressure on the siutilirijik. This situation can be overwhelming for those who are more vulnerable or with competing family or personal priorities.

Training of Inuit and non-Inuit staff

Since more formal training of Inuit hearing specialists takes place up North and availability of trainers and trainees is limited, it is not possible to cover all the topics in the manual. Instead, the more essential aspects of the trainees' daily activities are focussed upon and other areas are not covered or are developed informally. At the moment, no systematic evaluations of the trainees have taken place and there is a need to ensure they meet a common standard. On the other hand, not all Inuit hearing specialists are familiar with writing exams in English or Inuktitut, so testing can be challenging for them.

Audiologists are trained in southern institutions, where, in most cases, little attention is given to community based practice, especially concerning the Inuit, First Nations, and Métis. As a result, they are trained to focus on individual services and to be task oriented instead of networking and building relationships as the priority of action when one enters the community based model of services.

As noted in the 2010 SAC survey published as *Speech, language and hearing services to First Nations, Inuit, and*

Métis Children in Canada, with a focus on children 0 to 6 Years of Age, many audiologists do not feel prepared by their university training to work with First Nation, Inuit, or Métis population (SAC, 2010a). At HOP, newly hired audiologists receive only a limited introduction to Inuit culture, traditions, and beliefs and most of it is delivered by a non-Inuit person.

The orientation of non-Inuit audiologist is mostly directed towards specific professional tasks and procedures. Because of frequent turnover of staff, orientation is frequent and newcomers are not systematically given the full context in which the HOP program was developed. It can therefore be a challenge to provide the broader vision of the work to be accomplished, and the cultural, linguistic, and social context in which they will work. Neither of the two Nunavik hospitals holds any orientation or training sessions to prepare new employees from the South to work with Inuit population. In some communities, Inuktitut courses have been made available to non-Inuit but there is no sustainable funding and no guarantee of the availability of an Inuktitut teacher.

Solutions

Training of non-Inuit staff

In the last few years, some Canadian universities have started to develop meaningful initiatives in order to expose students in audiology and speech pathology to the reality of First nations, Inuit, or Métis people. Special courses and opportunities to complete a practicum in a community (including the HOP) are examples that can inspire other universities to participate in better knowledge and understanding as well as in better preparation of professionals to engage in working with this population.

Model of service delivery

When the coordinator position was created on the Hudson coast in 2008 and the choice was made to have itinerant audiologists instead of a full time position based up North, the main reason was to maintain continuity of professional services. Having audiologists based in the South and travelling to Northern communities was thought to facilitate longer commitment to the program and therefore more stability of services. Since that changed occurred, all the communities of the coast have been visited at least once a year.

Inspired by the work of Zeidler (2011) it would be useful, at this point, to interview members of the Inuit communities, either patients and/or partners in order to find out how they view the two models of service delivery and what they think would be the best realistic option to better serve them.

In the report on the literature review completed by the SAC project on *Speech, language and hearing services to First Nations, Inuit, and Métis Children in Canada, with a focus on children 0 to 6 years of age* one of the alternatives to traditional models of service delivery discussed was the use of telehealth as a potential tool to provide access to specialized services in isolated communities (SAC, 2010b).

While distance videoconferencing or more specific interventions such as distant ABR (auditory brainstem responses) testing have not been used within the Hearing and Otitis Program consultation activities, collaboration with ENTs has been facilitated by the use of internet and video otoscopy, allowing audiologists to take pictures of eardrums and send them through email for consultations to ENT physicians based in Montreal. These consultations have not been used systematically but have allowed, in some cases, faster access to surgeries or further intervention that would otherwise have been delayed by long waiting periods before an ENT visit could be done.

Future plans and directions

Training issues

In order to harmonize the skills and knowledge of the Inuit hearing specialists, it would be useful to set up a well-defined sequence of topics to be covered. On each visit by the audiologist, a training session could take place and if the knowledge is already there, only an evaluation would take place. This suggestion aims at training sessions that are accessible, systematic, as well as easily executed within the activities of the program.

Concerning the orientation session for non-Inuit staff, it should involve getting to know the community members. It would certainly be interesting to discuss with the latter about the way they would prefer to introduce newcomers. Since the HOP wants to maintain the focus on community based activities, the first visit up North for new audiologists should also focus on introduction to the different local organizations they are most likely to meet within the activities of the program.

Follow-up of universal newborn hearing screening

Planned to be in effect by spring 2014, the Universal Neonatal Hearing Screening (UNHS) provincial program brings new challenges for hearing services up North. First, because, as discussed, there is a high turnover of Inuit and non-Inuit staff, maintaining experienced screeners in the region might be a challenge. There are four birth centers in Nunavik. Making sure the child completes the screening and receives the appropriate follow-up before 3

months of age will be challenging especially in communities that do not have a screener since parents might have to travel to another community. Also, looking for long term rehabilitation services when on-going services are actually non-existent in the North may put pressure on the HOP to develop services as well as expertise that are not part of the activities of the program.

All of the constraints mentioned above are issues that may reduce the accessibility of the Inuit population to a program that is intended to be universal. At the moment, medical staff on both coasts, paediatricians, ENTs, and audiologists are pre-emptively working to explore ways to facilitate the implementation of the protocol. However, the population concerned here should be part of the discussion as families need to be informed of the screening protocol and what is involved if not completed.

Conclusion

The main goal of this article was to give an overview of the Hearing and Otitis Program in Nunavik, its structure as an outreach program, as well of some of its challenges.

In 1990, Crago et al. already mentioned how challenging it is to develop a community based program for specific populations. However, almost 25 years after the HIINQ was created, the program remains active, overcoming obstacles to serve the best interests of the population. Solutions have shown the need to be flexible and creative, especially when it comes to maintaining the expertise of the trained personnel, either Inuit or non-Inuit, already in place. This is believed to be the key to maintaining relationships, mutual understanding, and for non-Inuit to get to know the northern reality.

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End Notes

[1]For a better understanding, the words siutilirijik and siutilirijiit hold the same meaning, the first being the singular and the other the plural form. Aaniasiurtiapik is also the singular version of aaniasiurtiapiit.

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Being Outside of the Box: Audiology in Northern Québec

Être hors des sentiers battus : l'audiologie dans le Nord du Québec

KEY WORDS
INUIT
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HEARING LOSS
NUNAVIK

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Abstract

The Inuit of today have a very high prevelance of hearing loss due mainly to otitis media and noise exposure. In Nunavik, (Northern Quebec, Canada) for more than twenty-five years, there has been a specialised audiology program which incorporates Inuit hearing specialists. We describe the extent of the hearing problems, some solutions adapted to the north, and the training and role of the Inuit hearing specialists.

Abrégé

Les Inuit ont aujourd'hui un taux élevé de prévalence de perte auditive due principalement à l'otite et à l'exposition aux médias et au bruit. Au Nunavik, (Nord du Québec, Canada), pendant plus de vingt-cinq ans, il y a eu un programme spécialisé en audiologie qui fait place à des spécialistes de l'ouïe qui sont Inuit eux-mêmes. Nous décrivons la portée des problèmes auditifs, quelques solutions adaptées au nord et la formation et le rôle des spécialistes audiologistes Inuit.

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The Inuit are an Aboriginal group living in the Arctic regions of Russia, Alaska, Canada, and Greenland. Because of the remoteness, Inuit in Canada maintained a nomadic traditional existence with little contact with modern civilisation until the early 20th century.

The 55,000 Inuit in Canada do not live in reserves. They live in Nunatsiavut (Labrador), Nunavik (northern Quebec), Nunavut, and the Inuvialuit (NWT). Their medical and educational services are governed by four provincial/territorial jurisdictions. In addition, one in five Inuit now live in cities in the south.

During the past 50 years, living habits have changed extensively and rapidly. Inuit villages have services including a school, clinic, internet and satellite TV, in addition to stores selling food and other goods from the south. The villages are accessible by airplane year round and by sea during the summer months.

NUNAVIK

In 2006, the total population of Nunavik as reported by Statistics Canada was close to 11,000, with 90% of the residents being Inuit. Nunavik Inuit pay both federal and provincial sales and income taxes. Jurisdiction was transferred from the federal to the provincial government at the signing of the James Bay and Northern Quebec Agreement in 1974. While 60% of Inuit in Nunavik have part-time or full-time salaried employment, traditional activities such as hunting, fishing, and berry picking are still widely practiced (Makivik Corporation, 2007).

Thirty-four percent of the Nunavik population is less than 15 years old, as compared to only sixteen percent in the rest of Quebec. Inuttitut is the dominant language spoken and many elders and younger children speak neither English nor French. The first three years of school are taught in Inuttitut, with about equal numbers of students choosing to study in English and French beginning in grade 3.

The two hospitals, Innulitsivik and Tulattavik, provide medical care to villages on the Hudson and Ungava coasts, respectively. The population of Nunavik has doubled in the last 30 years (Régie régionale d e la santé et des services sociaux Nunavik en collaboration avec l'Institut national de santé publique du Québec, 2011).

Review of causes and extent of hearing problems in Inuit

The Inuit have a high prevalence of hearing impairment, which began following contact with European civilizations. The main causes of hearing loss are otitis media and noise exposure (Baxter, 1990).

In 1984, the prevalence of hearing loss in Cree and Inuit students living in the same community, Kuujjuarapik on Hudson Bay, was compared. Normal hearing in both ears was found in 96% of Cree as compared to 77% of the Inuit school children. Only 13% of Inuit children showed no evidence of past or present middle ear disease, as compared to 70% of Cree children (Julien, Baxter, Crago, Ilecki & Therien, 1987). Otitis media is therefore a critical and ongoing health challenge for Inuit children in particular.

In Inuit babies, acute otitis media often causes the tympanic membrane to rupture rapidly. Repeated infections can lead to a chronic eardrum perforation and conductive hearing loss. In a study of children aged 2 to 6 years old in Inukjuak, Nunavik, prevalence of chronic perforation was found to be 10.8%. Risk factors for developing chronic otitis media included having siblings with otitis media, the number of persons in the home, and the age at first consultation for otitis media (Bruneau, Ayukawa, Proulx, Baxter, & Kost, 2001).

Since the adoption of the Haemophilius influenza vaccine in 1988, sensorineural hearing loss due to meningitis has been very rare.

In Nunavik, kindergarten students have been tested for the past 20 years. When time allows, we also do screening in daycares, and grade 2 students. While the prevalence of hearing loss varies considerably between communities, overall approximately 20% of all students in Nunavik have hearing loss in one or both ears (Ayukawa, Lejeune, & Proulx, 2004).

Qanuippitaa study

In 2004, the Canadian Coast Guard Ship Amundsen visited the 14 villages of Nunavik to carry out an extensive health survey called "Qanuippitaa? How are we?"(Rochette, St. Laurent & Plaziac,2008). The survey included a hearing test of 821 adults (Ayukawa, Belanger & Rochette, 2008). The evaluations were performed on board the ship in a small soundproof booth. Only 56% of adults were found to have normal hearing, which was defined as a pure tone average (PTA) at 1000, 2000, and 4000 Hz of less than 26dB in both ears. The prevalence of a hearing disability of a moderate loss or greater for adults (age 18 years and up) in Nunavik was 7.6 %. This represents among the highest prevalence rates of hearing loss in the world, with only 3 of 31 countries that have participated in the WHO survey of epidemiological studies reporting similar or higher prevalence rates (Pascolini, & Smith, 2009).

Men were found to have a prevalence rate of hearing loss that was three times greater than that reported for

women. Inuit men are exposed to high levels of noise in both traditional and occupational activities, including rifles, shotguns, snowmobiles, power tools, motorized ice augers, and heavy equipment. Seventy-five percent of the men aged 45 and over were found to have a mild or worse bilateral hearing impairment. Twelve percent of men were found to have a moderate bilateral hearing loss or worse (Ayukawa, Belanger & Rochette, 2008).

Hearing and Otitis Program

The Hearing and Otitis Program began in 1985 and was initially based at McGill University. Funding was obtained from the Quebec Ministry of Health in 1986 for the two northern hospitals which included salaries for two Inuit workers per coast. By 1987, services were being delivered in the north by traveling teams which included an audiologist, a hearing aid dispenser, and the Inuit hearing technicians known as "siutilirijiit". However, the work of the siutilirijiit was not as an interpreter but followed these guiding principles originally outlined in 1985: (Crago, Hurteau, & Ayukawa, 1990)

1. Trained Inuit personnel must be involved in all aspects of the service delivery.
2. The cooperation, advice, and participation of the Inuit must be sought.
3. Inuit language, culture, life-style, and attitudes must be considered in the project design.
4. The project should provide adequate counselling to the patients and their families at the time of treatment.
5. Follow-up and long-term contact is needed to insure the success of the program.
6. Services should be provided in the native language by a trained specialist rather than through the use of an interpreter.

For the first ten years, the Hearing and Otitis Program provided audiological services to both the Hudson and Ungava coasts. Since 1994, when each hospital hired their own audiologist, their service models have evolved separately due to differing management priorities. This article describes the situation on the Ungava coast where the author (HA) has been audiologist since 1995.

TRAINING OF INUIT SUPPORT PERSONNEL

Siutilirijiit have been trained using various methods which depend on the trainer, the student, their level of education, as well as many other factors. In the beginning, much time and effort was put into developing a curriculum. However the use of written materials and oral lecture format for training has not been very effective. A better method has been to begin with direct experience and to gradually incorporate theoretical explanations in the context of case-based scenarios. For example, a trainee will observe and then do pure tone testing on the first day, and when confident will start tympanometry, otoscopy, etc. with supervision and guidance from the audiologist.

Week long training sessions have also been carried out. The advantages are that this develops a sense of collaboration, can give the opportunity for more experienced Inuit workers to teach the beginners, or trainers can be invited for special topics. Some specialty topics have included: calibration, cerumen management, hearing aid trouble shooting, noise induced hearing loss, speech and language problems. The disadvantages include the significant cost (travel, accommodation), and effort needed to organise.

For example, one of the co-authors (AMR) who is a recently trained siutilirijiit, in one year learned basic ear and hearing screening as well as counselling on ear care and the prevention of hearing loss by working together with the audiologist. In addition, two weeks at our team's hearing aid dispenser's office in the south improved her skills in hearing aid care and trouble shooting. During the ENT visit, she had the opportunity to observe PE tube and tympanoplasty surgeries which has allowed her to give better explanations to potential surgery candidates.

In each village there is also a local Hearing and Otitis person who helps during the tours and is the contact person between visits. They can be regular workers at the clinic in which case they are usually stable. If not, they may be workers who are on-call for replacement or for specialist visits and turn-over can sometimes be high. Some Hearing and Otitis workers have later become siutilirijiit, if their home situation allows for travel.

The main disadvantage of this informal training method has been the lack of recognition of the skills of the siutilirijiit by the hospital management as well as by professional organizations such as SAC.

DESCRIPTION OF TOURS

Every year, each community is usually visited three times. There is a school visit as early as possible during the academic year. Depending on staffing, this tour can be done by the audiologist or siutilirijiit or both together with the local worker. The priority is to check the students' hearing aids,

the sound field amplification systems in the classrooms, and inform teachers of the needs of students with hearing loss. The visit can include the kindergarten and grade 2 screening (both done annually), and classroom visits to do hearing awareness and hearing conservation activities.

During the team tour, both the audiologist and siutilirijiit travel and work primarily at the health clinic together with the local Hearing and Otitis worker. At this time the focus is to see those with known problems and the new referrals, make recommendations for new hearing aids, and do hearing aid checks. A daycare screening and other public health type activities may be done, such as promotion of hunter's earmuffs and FM radio programs.

The hearing aid dispenser visits about 2-3 months after the team tour. He will fit new hearing aids, return repaired hearing aids, and do checkups and adjustments. He usually works with the Hearing and Otitis worker in the village, and sometimes the siutilirijiit. Depending on the needs of the village, extra visits or combined visits may be made.

Rehabilitation options

Because of intermittent draining of the middle ear due to chronic eardrum perforation use of conventional hearing aids is often problematic. Children with bilateral hearing loss often start with a bone-conduction hearing aid. When they are older, a behind-the-ear hearing aid may be fitted with two ear molds, or an in-the-ear hearing aid or a receiver-in-canal hearing aid. Individual hearing aids and other assistive devices are covered by the Québec health care program.

Since 1997, more and more classrooms have been equipped with sound field amplification systems in which teachers use a wireless microphone to broadcast their voice through loudspeakers. Currently there are about 120 sound systems amplifying almost every primary classroom and most secondary classrooms. Sound field amplification was shown to significantly improve speech intelligibility and listening behaviours for both hearing impaired and normal hearing Inuit students (Eriks-Brophy & Ayukawa, 2000). Consulting with teachers and providing in-service on the use of the sound field systems is an important and ongoing role of the team. As it has proven difficult to find ongoing funding, maintenance and replacement of old equipment is now the main challenge.

Up to present, there are only two BAHA (bone-anchored-hearing-aid) clients. The successful candidate had bilateral atresia, while another individual with chronic otitis chooses not to use the device. Both were provided with equipment through a charitable foundation and were less than 18 years of age at the time of implantation. Due to difficulties in funding for adults and the time required for adapting fitting and follow up protocol, this option has been deferred for the time being.

Mothers-to-be who are at high risk are sent to Montreal for delivery at the McGill University Health Centre and the newborns receive hearing screening before returning to Nunavik. Follow up of babies needing to be re-tested is done during the team tour, and one baby with a unilateral sensorineural hearing loss has been identified.

Great challenges remain with providing adequate rehabilitation for speech and language in Inuttitut for pre-school children. Since 2009, the school board and health board have jointly funded a training program for Inuit special education teachers provided by a speech/language pathologist, who has similar experience in training Inuit professionals in Nunavut. This training is ongoing, and the goal is that pre-school children will ultimately receive services from these teachers. However, at present, services are inadequate in this age group.

ENT collaboration

An ENT specialist visits the hospital in Kuujjuaq twice a year to provide consultations and perform surgery which consists primarily of pressure equalisation tubes and tympanoplasties. Tympanoplasties are not recommended for children because the success rate is better in adults (Duval, MacDonald, Lugtig Mollins & Tate, 1994). Consultations are also done using video otoscopy. Photos of eardrums are stored and later emailed directly to the specialist, or video-conferencing technology can be used for reviewing the consultations together.

Prevention of hearing loss

Due to the high prevalence of hearing loss in Inuit men, preventative efforts have been made that focus on encouraging individuals to protect and preserve their hearing. After demonstrating and testing different devices, it was found that hunters are willing to use "high-tech" hunters' earmuffs, which amplify soft sounds and automatically dampen noise at dangerous levels. These are now available at subsidized prices in many communities.

Other prevention methods have included visiting classrooms or alternatively providing teachers with activities to make the students appreciate their hearing and showing what the effects of a hearing loss would be. Means of raising community awareness include visits to classrooms and musical events with a sound-level meter to measure the

sound of I-pods and concerts, provision of information on noise-induced hearing loss, free earplugs, and demonstrations and raffles of hunters' earmuffs and noise-cancelling headphones. The community FM radio stations and local newspapers and magazines have all helped publicize hearing loss issues and hearing loss prevention to the general population.

One village example

During the past year, the audiologist and siutilirijiit visited Kangiqsujuaq (population 600) for a week in October for the school visit, ten days in February for the team tour, followed by the hearing aid specialist visit in April. During the school visit, all the teachers were met, and the kindergarten and grade 2 students were screened. Five of ten kindergarten students tested failed the screening (hearing worse than 20dB at 500, 1k, 2k, or 4k, or abnormal (Type B) tympanogram or non-intact eardrum), and two of twelve grade 2 students failed. There are nine students with hearing aids at that school, and none were consistently using their hearing aids, some having "lost" them, some being unwilling to use them, and some having a dead battery, or an ear needing treatment. At the October visit, there were seven functioning sound field systems, and the new parts and three new sound field systems which had been ordered in March had not yet arrived. A young technically savvy Inuit teacher's aide was asked to help the special education teacher install and take care of the equipment. In February, a visit to the school revealed that there were thirteen systems working, and two needing repair. The school had received new funding from the municipality for upgrading the gym amplification, which is used for assemblies, and as well they were planning to buy spare parts and amplify the one remaining classroom. During the team tour, a new Hearing and Otitis worker worked with us. In total 53 clients were seen at the clinic, and eight new hearing aids recommended. A partial daycare screening was carried out; only testing those preschoolers referred by the clinic or daycare educators. Of the 23 preschoolers assessed during the tour, half will be followed up for ear problems. These include five children with tympanic membrane perforations and two with PE tubes. There was also one baby who had failed newborn hearing screening (both OAE and AABR) in one ear, and now at seven months old failed OAE testing in both ears and had flat tympanograms. Four video consults were recorded for later evaluation by the ENT specialist. These were reviewed with him after the tour using video-conferencing.

CONCLUSION

Working in a remote area, in a culture different than one's own involves special challenges that have been met by the inclusion of Inuit support personnel for decades in Nunavik. There is a known problem of professional turn-over in remote regions that can seriously affect services. Experience has shown that generally local workers stay longer than those brought in from south. The job of siutilirijiit started as a full time position, and involved many weeks of travel. In between tours, their duties include secretarial tasks such as sending and receiving hearing aids for repair, filing, updating databases, placing orders, making preparations for travel, translation, plus time spent on training, development of materials, and other projects. When a siutilirijiit is not based in the same locale as the audiologist, there can be problems in providing structure and supervision. The job of siutilirijiit has now evolved to become two or three part-time positions, allowing for more flexibility, and fewer weeks away from home. Some Inuit may work a few years, take time off and come back when family commitments change.

The presumed disadvantages for the audiologist in having a non-Inuit assistant or having no assistant are that they could be unaware of mistakes being made, such as inappropriate counselling, and could suffer increased risk of burn out, frustration, or judgemental behaviours.

Visits to classrooms, daycares, hunter support programs, and all public health interventions are much more effective when they include an Inuit partner. Teachers, students, and the public appreciate having trained Inuit health workers who are able to provide services.

Hearing loss and hearing conservation efforts are an enormous priority for the Inuit communities of Nunavik. The Hearing and Otitis Program, which has been developed and refined over many years, demonstrates how partnerships between the audiologist and siutilirijiit result in improved communication and better services for the population, as well as increased job satisfaction for the team as a whole.

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First Nations Elders' and Parents' Views on Supporting their Children's Language Development

Points de vue d'anciens et de parents des Premières nations concernant le soutien visant le développement langagier de leurs enfants

KEY WORDS
FIRST NATIONS
PARENTS' BELIEFS
ELDERS' BELIEFS
LANGUAGE GOALS
LANGUAGE SOCIALIZATION
CULTURE
CHILD DEVELOPMENT

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Abstract

This exploratory study aimed to support practitioners to provide services in ways that are culturally congruent by gaining insights into First Nations Elders', grandparents', and parents' views and goals for their children's speech, early language acquisition, and communication. Conversational interviews with 65 First Nations Elders, grandparents, and parents of young children in four provinces in Canada yielded information about their beliefs and values regarding their children's speech-language learning, the perceived value of early learning and intervention programs, and roles and goals for speech-language services. The findings challenge prevalent stereotypes that First Nations caregivers prefer children to be quiet, while highlighting language socialization goals for children to learn and respond to social cues regarding the amount, form, and contexts of verbalization. The findings invite S-LPs to consider a role they could have in relation to the high value that many First Nations caregivers place on their children becoming bilingual in English and their Indigenous language. First Nations caregivers' receptivity to S-LP services was confirmed, as long as services are provided in ways that ensure cultural safety for children and families. The findings reinforce long-standing calls for investments in strengthening capacities of First Nations people to support speech and language development in ways that are locally appropriate and in accordance with the particular values, goals, and language socialization practices of individual families.

Abrégé

Cette étude exploratoire visait à soutenir les praticiens dans une prestation de services de manières qui soient culturellement congruentes en essayant de comprendre les points de vue et les buts des anciens, grands-parents et parents de Premières nations touchant le langage, l'acquisition précoce du langage et la communication de leurs enfants. Des entrevues sous forme de conversations tenues avec 65 anciens, grands-parents et parents de jeunes enfants de Premières nations dans quatre provinces du Canada ont rapporté des informations sur leurs croyances et leurs valeurs quant à l'apprentissage langagier de leurs enfants, à la valeur perçue des programmes d'apprentissage précoce et d'intervention, et quant aux rôles et aux buts des services d'orthophonie. Les conclusions viennent à l'encontre des stéréotypes en cours voulant que les soignants des Premières nations préfèrent que les enfants soient tranquilles, tout en soulignant les objectifs de socialisation linguistique permettant aux enfants d'apprendre et de répondre aux indices sociaux touchant la quantité, la forme et les contextes de la verbalisation. Les conclusions invitent les orthophonistes à considérer un rôle qu'ils pourraient avoir en relation avec la haute valeur que de nombreux soignants des Premières nations accordent à l'acquisition d'un bilinguisme incluant l'anglais et leur langue autochtone par leurs enfants. La réceptivité des soignants des Premières nations aux services d'orthophonie a été confirmée, en autant que les services soient dispensés de manière à assurer la sécurité culturelle des enfants et des familles. Les conclusions viennent étayer les appels de longue date à des investissements consacrés au renforcement des capacités des peuples des Premières nations de soutenir le développement langagier de façons qui sont localement appropriées et qui respectent les valeurs, les objectifs et les pratiques de socialisation particuliers des familles individuelles.

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Introduction

Little is known about First Nations, Métis, or Inuit caregivers' expectations, goals, and approaches to their young children's speech and language development. Yet these are populations with growing needs for support to ensure optimal development outcomes. The population of Aboriginal children in Canada is increasing at 2.5 times the rate of non-Indigenous children in Canada: approximately 9% of Aboriginal children are under 5 years of age, compared to 5% in the non-Aboriginal population (Statistics Canada, 2008). Aboriginal children are far more likely than non-Aboriginal children to live in conditions that create challenges to their optimal developmental and educational outcomes: more Aboriginal children live below the poverty line (52%), in sub-standard housing, and in single parent families (40%), and they are more likely to be placed in special learning classes soon after commencing school, and to leave school without achieving a high school diploma (Ball, 2008; Findlay & Janz, 2012a,2012b; Statistics Canada, 2008). On virtually all major health indicators, Aboriginal children have poorer outcomes compared to non-Aboriginal children (Adelson, 2005; MacMillan et al., 2010; Smylie, 2009).

Speech-language delay and disorders are perceived to be one of the most prevalent developmental challenges for Aboriginal children (Canadian Council on Learning, 2007; de Leeuw, Fiske, & Greenwood, 2002; Minister of Public Works and Government Services, 2002). This perception, largely based on informal information gathering, was reinforced in a recent study by Statistics Canada, one of only a few studies that have gone beyond summarizing anecdotal information (Findlay & Janz, 2012a, 2012b). Using an 'Aboriginal Children's Survey' tool created by Statistics Canada in consultation with a largely Aboriginal committee, analysis of parent-reported health problems of 12,845 Aboriginal children aged 6 months to 5 years old indicated that speech-language difficulties were among the top three health conditions reported by parents (10% of First Nations children (n=5,167); 9% of Métis children (n=3,793) (Findlay & Janz, 2012a; Findlay & Kohen, 2013); and 5% of Inuit children (n=1693) (Findlay & Janz, 2012b). About three-quarters of children reported by parents as having a speech-language difficulty had reportedly received a professional diagnosis, and approximately the same number had reportedly received some type of treatment.

Given that a 10% prevalence of speech-language delays prior to school entry has been consistently reported for children across North America, the prevalence of speech-language delays among Aboriginal children may seem to be of little note. However, speech-language delays can be indicators of concomitant developmental problems (Catts, Fey, Zhang, & Tomblin 2001; Lindsay, Dockrell, & Strand, 2007; Powell & Bishop, 1992). In the context of English-medium, mainstream schooling in Canada and the U.S.A., weak language skills are associated with less readiness for school (Justice, Pence Turnbull, Bowles, & Skibbe, 2009), behaviour problems, poorer attention, lower cognitive performance, lower literacy skills, and lower educational achievement later in development (Silva, Williams, & McGee, 1987; Young et al., 2002). The overall persisting poor health, developmental, and educational difficulties found in the population of Aboriginal children in Canada, noted earlier, suggests that speech-language difficulties may be an early warning sign that warrants closer examination to determine whether enhanced language facilitation in the home, prevention, or early interventions could contribute to optimal developmental outcomes.

Early interventions have higher returns than later interventions (Heckman, 2006). Many Aboriginal groups in Canada are working to strengthen local capacity and government support for high quality, culturally informed early learning programs, primary school, and clinical ancillary services in order to improve Indigenous young children's opportunities for a successful start in school and in life. Within this context, there has been an increasingly audible call for programs to support Indigenous children's early language development.

Recently, a team of SAC members found that, among 1,194 S-LPs and hearing professionals who responded to a survey, more than half had provided services to Aboriginal young children between 2005 and 2010 (SAC, 2011). The authors reported that professionals expressed a high need for more information about First Nations, Métis, and Inuit cultures, languages, and communication development in order to feel prepared to work with these populations, but there is a scarcity of relevant information. As noted, there are many anecdotal reports of children's difficulties with speech development and early language learning, and cultural mismatches between mainstream services provided by non-Indigenous practitioners have allegedly led to ineffective actions and mis-interpretations of the sources, nature, and severity of Indigenous children's language development (B.C. Aboriginal Network on Disability Society, 1996; Eriks-Brophy, Quittenbaum, Anderson, & Nelson, 2008; Peltier, 2011; Sterzuk, 2008). It appears that, too often, language differences, and the cultural nature of raising children in First Nations, Métis,

and Inuit communities have been seen by cultural outsiders - including many teachers and clinicians - as evidence of deficits and dysfunction, rather than of 'differences' that are normative within children's home environments and that may contribute importantly to children's identities, cultural learning, and sense of belonging within their families and communities (Ball & Bernhardt, 2008; Battisti, Campbell, Friesen, & Krauth, 2011).

It has long been known that parents' expectations about their children's language development and the ways they interact with their children to promote their goals can vary significantly across cultures (Harkness & Super, 1996; Schieffelin & Ochs, 1986). Cultures vary in the types of competence that adults encourage in children, the developmental timetable they use to guide their actions, and the level of proficiency in various skills they want their children to achieve (Heath, 1983). Languages embody the cultures they express, varying from other languages along many dimensions relevant to children's early learning, including beliefs about teaching language to children, the value of talk, the significance of context for kinds of talk, aspects of story-telling, how status is handled in interactions, beliefs about intentionality, cause and effect, and aspects of social organization related to language-mediated interaction (Van Kleeck, 1994). Understanding cultural variations in goals for children's language learning, language socialization, and the pragmatics of communication heightens awareness of potential cultural biases in prevention and early intervention services. For example, Heath (1983) found that children whose home culture values listening, observing, and doing rather than a lot of talk are more likely to be marginalized when they arrived in a mainstream school where a high value is placed on verbal explanations and oral participation. This potential was underscored in a summary of descriptions of language socialization practices in Aboriginal families by Pesco and Crago (2008). Given the diverse cultural, linguistic, educational, and socioeconomic backgrounds of First Nations, Métis, and Inuit children and families that may be seen by S-LPs, it is important to understand the values and perceptions of primary caregivers with respect to their children's language development.

A survey of speech-language pathologists (S-LPs) across Canada who had more than two years of experience serving Aboriginal children concluded that an altogether different approach from mainstream practice approaches is needed when serving Aboriginal children, families, and communities (Ball & Lewis, 2011). While the speculations of outsiders to First Nations families and communities are raising questions about appropriate goals and roles for speech-language pathologists, published reports of the perspectives of First Nations parents and Elders themselves regarding these goals and roles have been lacking. As Peltier (2011), an Anishnaabek S-LP, notes: "Most S-LPs in Canada are not of Aboriginal descent and many clinicians have limited experience with Aboriginal populations. The perceived difficulty in service provision may stem from a mismatch between professional attitudes on one hand and the community values and ways of doing and knowing among Aboriginal peoples on the other hand" (p.127).

Alongside the evident need for early speech-language supports for Aboriginal children, there is growing commitment within the speech-language profession in Canada to improve services for Aboriginal children, shown for example in the focus on Aboriginal service needs at recent national and provincial conferences for S-LPs and audiologists. Within the profession, there is growing understanding of the need to create the conditions for cultural safety for Indigenous people seeking services for themselves or a family member (Ball, 2011; Smye & Browne, 2002; Zeidler, 2011). The timing, location, form, and intention of offering professional speech-language services can all affect whether a prospective client experiences cultural safety (Smye & Browne, 2002). When a parent or other caregiver seeks S-LP services, cultural safety can be promoted by avoiding assumptions about their goals for their child's speech and language development or for the support they are seeking from a professional (Ball, 2011; Peltier, 2011). A first step for a professional is to ask the primary caregiver about their goals for their child's speech and language development. It is also important to find out what Elders within a child's cultural community think about speech development and language learning. Elders are older community members who are often sought by parents and children for guidance based on their knowledge and wisdom about what is important for First Nations people to bring from the past into the future in terms of language, culture, spirituality and ways of life. As well, many First Nations children are being raised within circles of care that include grandparents in primary caregiving or other key roles. A key finding of a recent study on grandparent caregiving was an extremely high prevalence of grandparent caregiving among First Nations children in Canada: despite comprising roughly 1.4% of Canadian's over 45 years old, more than 17% of caregiving grandparents in Canada were of Aboriginal descent (Fuller-Thomson, 2005). The investigator speculated that, among other factors, First Nations grandparents' strong desire to preserve their culture may be one motivation for their caregiving. Broadening

one's scope to find out about the goals, practices, and potential contributions of extended family members may be a useful starting point for S-LPs seeking ways to ensure culturally congruent and safe practice.

S-LPs working with children to support their language development must have the means to learn about each family's values, beliefs, and priorities with regards to the language and communication development of their children. Using the Developmental Expectations Questionnaire to assess and compare the developmental knowledge and goals of parents and preschool teachers, Edwards, Gandini, and Giovanni (1996) found significant differences between the expectations held by parents and teachers depending on the community and culture. Sigel and Kim (1996) explored the relationship between parents' beliefs about children's learning and found that parents will likely report different beliefs about children's learning and their own efforts to teach children depending on whether the parent is directed to think of their own child, any child, or all children. In the current study, participants were directed to think of their own young child or grandchild. Westby (1990) suggested an interview format with open-ended questions asked in a somewhat informal, guided conversation. This was the approach taken in the current study.

The current study was intended to support practitioners' aim to provide services in ways that are culturally congruent by gaining insights into First Nations Elders', grandparents', and parents' views and goals for their children's early language acquisition and communication. The study sought their views about how their children learn language, how to support children's speech and language learning, the value of talk by and with children, the relative importance of Indigenous and English language acquisition, any challenges to their children's speech and language learning, and roles for S-LPs.

Method

Participants. Participants were 65 self-identified First Nations Elders[1], grandparents, and parents with at least one child under 7 years of age in four provinces in Canada, including 15% (n=10) Elders, 20% (n=13) grandparents, and 65% (n=42) parents. Although it is often a child's parent who decides whether and why to bring a child for assessment or intervention services, the views of Elders were sought in this study because the guidance of certain older members of First Nations who are revered for their wisdom and knowledge of cultural traditions is often taken into serious consideration by younger First Nations people. Grandparents were included because they often play central roles in raising First Nations children. Grandparents in the current study all reported having face-to-face contact on a weekly basis or more often with at least some of their grandchildren; none were the primary caregiver. Among the participants, 67% lived in rural communities and 33% lived in urban communities[2]. Lack of transportation funds to enable the investigators to travel limited possibilities for recruiting a representative national sample; however an effort was made to find interviewers who were well-situated to recruit participants. Among 65 participants, 29% (n=19) lived in Saskatchewan, 28% (n=18) in Manitoba, 23% (n=15) in Ontario, and 20% (n=13) in B.C.

Four paid interviewers were contracted to recruit participants, to use a prescribed procedure for requesting informed consent, and to gather data according to a prescribed interview protocol. Two of the four interviewers identified as First Nations people. Three of the four interviewers were speech-language pathologists.

Interviewers recruited participants from towns and on-reserve communities in their respective province of residence. Initially a convenience sample was used, drawing upon contacts that the interviewers had as a result of long-standing, trusting relationships with First Nations people in their regions. Respondents were offered refreshments and a small honorarium to recognize their contribution of time and personal knowledge. Interviews were conducted in the interviewee's community at a location of their choosing, including respondents' homes and community facilities such as recreation or education centres.

Procedure. Respondents participated in a one-hour individual conversational interview conducted in the manner described by Westby (1990), guided by the interviewers' pre-planned questions shown in Appendix 1. The questionnaire was developed collaboratively and iteratively. Initially, a mix of open- and closed-ended questions were designed by the authors and a group of S-LP practitioners and scholars interested in gaining insight for practitioners wishing to support speech and language development of Indigenous children. The authors also created a protocol for exactly how interviewers should ask questions (e.g., the question sequence, responses to requests for clarification, sample follow-up probes, etc.), a response form for hand-writing answers, and a requirement of reading recorded answers to the open-ended questions to respondents to check for accuracy before moving on to the next question. Audio-recording was used in the pilot phase, but not in the formal data collection phase, as it was determined during the pilot

phase that audio-taping could be a barrier to recruitment and to the spontaneity and fullness of respondents' answers. During the formal interviewing phase, interviewers made extensive hand-written notes of the interviewee's responses to each question. These notes were read back to the interviewee to ensure accuracy.

The list of initial questions and the protocol for conducting the interview were revised over a series of pilot interviews conducted by two of the four interviewers. Revisions generally involved shortening the list of questions to ensure that data could be collected within approximately one hour and clarifying the wording of some questions and probes to ensure that respondents readily understood the intended meaning of each question. During the formal data collection phase, pilot respondents were not included in the research sample. Interviewers typed the answer form to ensure that it was clearly understandable by the project team members who analyzed the data. Questions addressed: demographic information; important learning during early childhood; how children learn; how children learn language; the relative importance of listening and talking; parents' roles in helping their children learn; children's learning in their mother tongue and/or English; the value and effectiveness of early childhood and 'school readiness' programs; non-Indigenous people working with their children; and helpful actions to support Indigenous people to elaborate and use their own ways for supporting their children's learning. As well, some questions asked participants to specify an age range for developments in children's speech and language acquisition.

Frequency analysis was used to summarize participants' responses to closed-ended questions (e.g., asking for an age range). Statistical analyses to determine inter-province differences in patterns of responses were not possible due to the low sample size for each province. Chi-square analyses were conducted to explore relationships between responses and parent/grandparent or Elder status. The co-principal investigators, who were not interviewers, used a collaborative, iterative, qualitative data analysis procedure to develop a pragmatic coding system (Burnard, 2006) to summarize responses to open-ended questions. Each team member reviewed half of the participants' responses with the goal of constructing themes or summary statements that represented recurring ideas expressed by participants. The team members then compared their constructed thematic framework and read the other half of the response protocols with the goal of finding those components of the two frameworks that worked well to represent the data in the second set. This iterative and negotiated process resulted in modifications to the thematic framework until the team was satisfied that it accounted for key recurring concepts, ideas, beliefs, and experiences expressed by participants.

Results

Language spoken by participants. English was the language predominantly used by 91% of the participants; 4.5% reported using Cree and 4% reported using Ojibway predominantly. Among the participants, 17 different Indigenous languages were reported as part of their ancestry: Dakota, Cree and Ojibway were the most common heritage languages reported (27%, 24% and 18% of interviewees, respectively). Ninety-seven percent of the interviewees reported that their children spoke English most of the time at home and in the community, however 27% reported that their children spoke an Indigenous language occasionally as a second language, including Cree (12%), Dakota (6%), Ojibway (4.5%), Cowichan, Dene, and Hul'q'umi'num' (4.5% in total). These languages reflect the geographical distribution of the sample.

Inter-province and inter-generational differences. Using Chi-square analyses, no significant differences were found between parents and the older generation of Elders and grandparents or among respondents based on province on any response variable.

Views about language development. Asked about when children "begin to talk", 12% of participants stated from birth to 6 months, 25% stated from 6 to 12 months, 37% stated from 12 to 18 months, 22% stated between 24 and 30 months, and 4% stated between 30 and 36 months. Asked about when they would become concerned if one of their children was not yet talking at all, 6% stated by 1 year of age, 20% stated by 2 years, 27% stated by 3 years, 25% stated by 4 years, 12% stated by 5 years, and 10% stated after 5 years of age.

Both talkative and quiet. Many (77%) Elders, grandparents, and parents stated that it is important that parents are talkative with their children to support children's language learning. However it was noted that, traditionally, parents demonstrated activities, with or without words, rather than engaging in a dialogue with a child. Asked if they preferred a child to be more "talkative" or "quiet", 56% preferred a "talkative" child, 12% preferred a "quiet" child, and 32% expressed no preference or stated that "it depends." Seventy-eight percent of the participants variously explained that children should become able and willing to express their ideas, thoughts, and questions verbally in order to support their learning, self-esteem, success

in school, and in life. As one parent commented: "They aren't going to learn if they're not talking, so I want them to talk." Nearly half of the participants, including all of the Elders, expressed that children should become able to be quiet at certain times, such as when Elders, adults, teachers, or visitors are talking and at certain events such as ceremonies, prayers, and feasts where it is important for children to observe, learn, and show respect. Teaching children to be observant and to learn when to talk and when to listen to the ideas, opinions, and answers of others was viewed as important and congruent with First Nations cultures. As well, some participants stated that children need to be shown, mainly through being ignored, that certain speech content is not valued, such as boasting or drawing attention to one's possessions, challenging the views of those older than oneself, and "stating the obvious" such as telling an older person something that the older person already knows or can see for themselves. A parent explained: "It seems that in preschool, the teacher often asks children to make a report or give a word for something that the teacher can plainly already see, like what colour is the sky today or how many cars are in the sandbox. We don't encourage children to speak up about things that anyone can know just by their own observing. It could be seen as rude."

Bilingual learning. A strong preference for children to learn both their mother tongue and English in their early years, including at home, in preschool, and in lower primary school, was expressed by three quarters of participants. Virtually all of the Elders expressed concern that the youngest generation in their community knows little of their heritage language, other than perhaps a few ceremonial prayers and songs. They explained that, without the language of their ancestors, their spiritual connection to those ancestors and the knowledge communicated through their language would be weakened. Many parents stated that their children need their heritage language in order to understand their identity and culture and for positive self-esteem. Parents also expressed the view that their children need English to survive and thrive in "non-traditional" environments including school and society as a whole, and their belief that it is easier to learn multiple languages in early childhood. No participant mentioned the possibility that it could be difficult for children to learn an Indigenous language that is not spoken in the home. One quarter of the participants preferred that children learn exclusively in their mother tongue at least through first grade to help them consolidate First Nations cultural identity which would be a foundation for their self-esteem and success in life. Only two participants expressed the view that children should only learn English.

Views about supports for early learning. First Nations Elders, grandparents, and parents generally expressed their view that love, care, and support from within a child's family and community have the greatest influence on children's early learning: the best ways to help children learn include spending time together with the children, telling them what they need to know, showing them, letting them try doing what is being taught, and then watch to see what they learned. A grandmother explained: "I take my grandkids out to do things – just going for a walk, or collecting mushrooms or grasses – see what interests them and talk with them about what we are seeing, ask what they are seeing. Talking and having experiences, just enjoying being together. That is a good way to get their words flowing." Virtually all stated that children's learning in the early years is very important, particularly becoming socially interactive and proficient in at least one language. While emphasizing the primary role of the family in supporting young children's learning, participants also saw value in early learning programs and speech-language services: 92% wanted programs to support children's early learning, and 83% wanted programs specifically to support school readiness. Participants suggested ways that existing programs for young children could be improved, including: better information about programs; more spaces; better accessibility; more trained, caring, and committed teachers; more community commitment; more focus on family participation and learning; and more support for Indigenous language and cultural learning.

Views about supports for speech language development. When asked whether children need help learning to talk, 80% of participants responded affirmatively, and 88% responded affirmatively to the question: Do children need help learning to understand words? Participants described various approaches to supporting children's speech and language development: 58% described their view that talking with children was the most important stimulus; 23% stated that children learn by listening, watching, and observing people who are talking with other people or with them; 18% emphasized repeated exposure, including adults repeating words and using language in consistent ways in different contexts; 17% described the importance of providing opportunities for children to talk without receiving criticism, and with opportunities to ask and answer questions, to share stories, and to describe their experiences. Supplementing verbal communication with activities, showing, pointing, and enactments was described as helpful by 65% (n=28) of the parents and 48% (n=11) of Elders and grandparents. A parent described: "The actions that go with the words. Watching the motion to help with the meaning. Emotions

that are expressed with the words and sentences." Some participants described in considerable detail various deliberate teaching methods that they thought were effective, such as sounding out words, pointing out object-word associations, repeating word sounds, emphasizing certain sounds, using repetition to teach words and concepts and building word groupings gradually, and using activities along with talking, such as telling children stories, demonstrating, pointing to things they are talking about, using facial expressions, body language, tone of voice, and using all the senses (e.g., how things look, feel and sound). A third of the parents (33%; n=14) mentioned going at the right pace for the child, and being sure to pause and wait for a child to respond verbally or non-verbally. Talking to children in ways that are meaningful to children, giving children time to talk as well, as asking children questions and encouraging them to ask questions was considered useful. Though some approaches to supporting children's speech and language development were more prevalent than others, virtually all of the participants described their view that children need to grow and develop their communication skills in an atmosphere of acceptance and love.

Preference for First Nations practitioners. Developing First Nations capacity to support young children's speech and language development, including parents, community members, and professionals, was identified as a priority by many participants. Some participants explained that First Nations people often have culturally based ways of socializing children and promoting their learning, and some are proficient in an Indigenous language, so they are best suited to promote local goals for children's early learning. Some participants pointed to the need for community members to receive training in how to help young children acquire Indigenous language while concurrently learning English.

Roles for non-Indigenous practitioners. Nearly 80% of participants expressed the view that a non-Indigenous person could support young First Nations children's speech and language development if they were open-minded and willing to first learn and become knowledgeable about First Nations family systems, traditions, values, history, and current issues. As one participant noted, a non-Indigenous person would need to really grasp that most First Nations people view language as the vehicle for passing on their culture and as the basis of their identity and existence. Some participants advised that a non-Indigenous practitioner, or an Indigenous practitioner from outside the community, would need to work together with a First Nations community member to learn about local practices, values, and resources, and they would need to be respectful and encouraging toward the children. They would need to support children's bilingual learning, but not to the extent of trying to teach an Indigenous language: 19% of participants stated that a non-Indigenous person could not support language development in children, as they don't know the values and beliefs that form the basis of language for First Nations people. All except one Elder stated that a non-Indigenous person could contribute to children's language development by supporting their overall early learning journeys through their love, care, kindness, patience, and respect.

Discussion

Elders, grandparents, and parents readily volunteered to participate in the study; additional recruitment was limited by a small research budget and the need to find interviewers across the country who had good relationships with First Nations community members to conduct the interviews. Much research has shown that marked variability can occur in caregivers' expectations for their children's development both between and within cultures, and that in some instances, intracultural differences can be greater than intercultural differences. Given the tremendous cultural and linguistic variability among First Nations in Canada, findings of the current exploratory survey should be taken with caution. The recruitment success of this small, exploratory study suggests the positive potential of recruiting a wider diversity of First Nations Elders and parents to participate in a more comprehensive survey of beliefs, practices, and preferences surrounding their young children's speech and language development, and their experiences of S-LP services.

Although participants came from a wide variety of urban and rural settings across Canada, there was considerable agreement on the topics discussed in the interviews. Overall, Elders, grandparents, and parents in this study expressed views that in many ways resembled those of non-First Nations parents, emphasizing the importance of early language learning and the primary roles of parents and other caregivers in the home for stimulating early language development by actively engaging children in dialogue, encouraging verbal expression, and providing specific language stimulation and feedback.

Some parents and Elders reported they would not be concerned if their child was not talking until three, four or even five years old. While some culturally-based variations in developmental timetables is expected, not talking until preschool age is far off of normative expectations for most children (Chapman, 2000),[3] and points to a need for S-LPs

to collaborate with early childhood educators, community health assistants, infant development consultants, and other practitioners to promote caregivers' knowledge of basic milestones in language development as well as warning signs that a child may require some professional intervention. A recent survey of 1,194 S-LPs and hearing professionals, including about half who had served Indigenous children in the past five years, found that a majority used direct services, sometimes in combination with prevention and/or distant consults; few reported engaging in community-wide education or training of local people, which is a recommendation based on study findings (SAC, 2011). Population-based speech and language screening at periodic intervals could also help to ensure that all parents are fully informed of their children's development in the area of speech and language in a timely way.

Elders, grandparents, and parents saw value in early childhood programs as one way to promote their children's language proficiency. This finding resonates with calls by Aboriginal groups over the past two decades for increased investment in community-based early childhood programs such as Aboriginal Head Start (Ball, 2008). In 1996, the Royal Commission on Aboriginal Peoples identified community-based programs for young children and their families as the most promising entry-point for facilitating language acquisition and supporting heritage language and bilingual learning. Although systematic data have not been gathered, compared to school-based efforts, there appears to be more momentum in community-driven programs to include opportunities for children to be exposed to and to acquire some Indigenous language, for example in 'language nest' daycare where the primary caregivers speak only in an Indigenous language, bilingual early childhood programs, and Aboriginal Head Start programs.

Among specific goals mentioned, participants emphasized that their children need to be socialized to attend to situational cues to be more or less talkative. An exploratory study of First Nations English dialects pointed to several distinctive features of First Nations discourse, including differences in the use of silence, listening, eye contact behaviours, turn-taking, and topic development in narratives, suggesting that First Nations children may learn culturally distinctive participation frameworks compared to non-Indigenous children (Ball & Bernhardt, 2008)[4]. Findings of this exploratory study suggested that First Nations children may be silent and/or may not engage in casual conversation about obvious everyday matters (e.g., the weather) in an effort to be respectful to other people, particularly adults. They may take a long time to respond to questions or to take up a turn in conversation, because they have been taught the importance of weighing their words carefully before speaking. In mainstream Canadian society, where introjections and short pauses between turns are the norm, this practice can result in First Nations children seeming to have nothing to say. Also, in an effort to listen carefully to what is being said to them, First Nations children may not make eye contact with their interlocutors, a practice which may be seriously misunderstood, for example, as being distracted or disrespectful. Anishnaabek S-LP Peltier (2010) explains that, within the Anishinaabe oral tradition, listening is valued more than talking because knowledge-keepers and language-keepers pass historical and cultural information on to the younger generations orally through stories and teachings, and younger people are expected to remember their words. Peltier speculates that because of this oral teaching and learning tradition, children's careful listening may involve processing and holistic meaning-making on the listener's part such that they are not only processing language input at cognitive (thinking) and physical (hearing) levels, but also emotionally (heart-mind connection) and spiritually (knowing that words are an expression of the speaker's spirit and the power that they possess). As she notes, this takes time. Many of the distinctive discourse features noted in the study of dialects and generally described by participants in the current study are also highlighted in the literature on Native American English discourse (Basso, 1970; Damico, 1983; Leap, 1993; Neha, 2003; Phillips, 1983). Crago (1992), reflecting on her observations of Inuit language communities in the north, warns that "practitioners who are ignorant of, or refuse to alter their practices in ways that recognize the strength of cultural patterns of communicative interaction can, in fact, be asserting the hegemony of the mainstream culture and can thereby contribute, often unknowingly, to a form of cultural genocide of non-mainstream communicative practices" (p. 37).

First Nations parents, grandparents, and Elders stressed the equal importance of children learning their Indigenous language, concurrent with learning English. The Royal Commission on Aboriginal Peoples (1996) explained that language is central to how First Nations, Métis, and Inuit children gain access to cultural knowledge and learn to participate and grow within their cultures: without their Indigenous language, their culture of origin could be lost, because it is impossible to translate the deeper meanings of words and concepts into the languages of other cultures. Unlike other groups in Canada for whom

English or French is not their heritage language, Aboriginal people do not have the option to look to another country of origin to reclaim their language. Canada is home to 11 Indigenous language families and over 60 distinct Indigenous languages. All of these are at risk of extinction within this century (Norris, 2007) as a result of government language planning and policies that have actively opposed or neglected them. Incongruously, a basic value in Canada is that regardless of where children live, programs for promoting their optimal development should be accessible, available, and linguistically and culturally appropriate to them (Canadian Centre for Justice, 2001). However, there are few or possibly no S-LPs in Canada who are fluent in an Indigenous language. The lack of S-LPs who could provide services in an Indigenous language or who could support the development of bilingual Indigenous-English communication skills is not unique to Indigenous language groups. In a recent survey, more than half of 384 S-LPs surveyed reported not being able to speak the language(s) of their client (D'Souza, Kay-Raining Bird, & Deacon, 2012). Nevertheless, the situation for Indigenous languages and for Indigenous children's success is particularly dire: investments in culturally appropriate supports for optimal language development of young First Nations, Métis, and Inuit children are relevant to a range of policy areas, including reparations for colonial government policies that have resulted in socioeconomic impoverishment and linguistic erosion among Indigenous Peoples, community development, education, literacy, and employment.

With most Indigenous children in Canada now learning English or French as their first language, one might assume that Indigenous children would not experience difficulties attributable to language mismatches at school. In fact, language-based challenges appear to figure prominently among the many contributors that may account for the high rate of identification of Indigenous children in Canada as having learning difficulties and the persisting high rate of early school leaving. First, there are still communities where a majority of Indigenous children learn an Indigenous language but are forced to start school in English or French with no bridging program. For example, in the north-eastern region of the country, 35% of Innu children in Labrador never attend school, a trend that, according to Philpott (2006), is partly due to having to face being plunged into an alien cultural, environment, and language of instruction. Second, there appear to be many First Nations children, especially in rural and remote communities, who speak a variant of English that is sufficiently distinctive to warrant recognition as a non-Standard (from the perspective of public schooling) English dialect. This creates communication difficulties for children, their teachers, and peers. Third, and related to dialect, the pragmatics of communication in some Indigenous families and communities, such as some features described by participants in the current study, may be very much at odds with the discourse expectations of teachers, other parents, and children in institutions of the dominant culture including public schools. Several Canadian investigators have reported unique difficulties confronting children who start kindergarten speaking a language or dialect different from the language of instruction (Crago, 1990; Wright, Taylor & Macarthur, 2000).

All these scenarios can create low self-esteem, cultural identity confusion and conflict, difficulties for Indigenous parents wanting to accompany their children in their journeys through formal education, lack of engagement in formal education, and lack of responsiveness to S-LP services that may be available. A process of engagement between an S-LP, a child's primary caregiver(s), and preschool or primary teachers is needed so that all parties are aware of the family's priorities regarding first and second language learning, potential advantages and drawbacks for a particular child to pursue bilingual learning at various points in their developmental and educational trajectory, and potential resources to support bilingual learning if this is of critical importance to the parent and child.

Elders, grandparents, and parents affirmed the potential for non-Indigenous providers to meet service needs, as long as they create conditions for cultural safety and take into account parents', grandparents', and Elders' goals for children's early learning and development. This point is illustrated in the report by Zeidler (2011) of successful practice by non-Indigenous service professionals in a First Nations community founded on initial investments in building trusting relationships and understanding local goals for child, family, and community development.

Although a S-LP may not speak an Indigenous language or dialect, an S-LP could be prepared to support First Nations children by understanding the ways their early language socialization is likely to influence their proficiency in various aspects of communication, interests, attention, memory, story-telling, social interactions, and responses to pedagogical techniques. S-LPs could potentially play a supportive role with Indigenous language speakers aiming to teach their language to a child. For example, S-LPs could share their knowledge of language acquisition when the usual exposure to the language is not working sufficiently well for the child, and their knowledge of bi/

multilingual learning. However, the meanings conveyed by any language go beyond its component phonemes and morphemes, and many First Nations people are concerned that the deep and often spiritual meanings of their languages are being lost by efforts to find one-to-one correspondences between Indigenous and English vocabulary, grammar, and story-telling (Peltier, 2010). An important role S-LPs can play in regards to the strong value placed on Indigenous language learning voiced by First Nations people is to act as an ally by advocating for official recognition of Indigenous languages and investment in language maintenance and revitalization efforts driven by Indigenous people.

The views expressed by Elders, grandparents, and parents in the current study may be useful as a general point of reference when developing activities to support early language development of First Nations young children. However, as noted, there is much diversity across and within First Nations cultures, communities, and families and assumptions cannot be made on the basis of any study, and this creates challenges for S-LPs to develop culturally appropriate and effective practices. As well, there are disproportionate numbers of First Nations children living in non-Aboriginal foster and adoptive homes, and the goals and preferences of these non-Aboriginal caregivers must also be understood (Farris-Manning & Zandstra, 2004). There are increasing numbers of programs in Canada that encourage and assist non-Aboriginal guardians to nurture connections between First Nations children and their home communities, cultures, and languages (e.g., Surrounded by Cedar, n.d.). Those working with children to support their language development must have the means to learn about the values, practices, and potential roles of all of the people who are playing significant roles in regards to the language and communication development of their children. Questions such as the ones asked in the interviews for the current study can be used by those involved in supporting children's early language development to learn about the views of the family members they are working with to help shape the services they provide.

Two of the interviewers in this study were S-LPs who had worked in the communities where they conducted interviews, including one interviewer who was a First Nations person from the local community herself. Both interviewers were surprised by how much they learned about the families who they interviewed that would be useful to them in delivering better services. A conversational interview could be followed by observing the interaction patterns that naturally occur in a family, in order to identify patterns that successfully support the skills that could be strengthened in order to pursue goals that are part of an agreed upon speech language facilitation plan. An important criterion for evaluating the effectiveness of initiatives to support Indigenous children's language and literacy may be the extent to which they support culturally-based language socialization practices.

The findings of this study reinforce the call by many Aboriginal leaders to invest in strengthening the capacity of First Nations people to deliver programs and professional services and to train First Nations community members in allied fields, such as early childhood education, infant development, and community health, to work collaboratively with S-LPs. Community-based practitioners such as early childhood educators, health representatives, and teachers are often well-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 S-LPs about the conditions, needs, and goals of a family or community. A recent survey by SAC (2011) found that about half of the professionals who responded to the survey provided some kind of training to community members, community-based support staff, or paraprofessionals. The ethics and the prospective utility of collaborative, strengths-based approaches to promoting speech-language development have been demonstrated by cross-cultural investigators (Ball 2003; Crago, 1992; Johnston & Wong, 2002; van Kleeck, 1994).

In this emerging practice, the current study indicates the importance of including, where possible, Elders as well as other older, extended family members in efforts to create a culturally- congruent, family-centred approach to speech-language facilitation, assessment, or intervention. While the Indian residential school movement and other colonial interventions greatly constrained the guiding roles of Elders that were once central to First Nations child rearing and language acquisition, the current healing movement that implicates both Aboriginal and non-Aboriginal people aims to revitalize this core aspect of First Nations culture. Elders' involvement can be particularly helpful to S-LPs working with young children because Elders understand the foundation role and specific features of their culturally-based oral tradition and of community discourse practices that are vital to maintaining cultural beliefs, practices, and languages (Peltier, 2010). S-LPs can offer their support as allies in this healing movement as well as in their work with individual children. Finally, there is a need for more research to explore the diversity and identify similarities in First Nations

values, priorities, and practices regarding children's speech and language development, and to identify resources within First Nations communities that could be harnessed in collaborative approaches to meeting a child's needs in ways that are congruent with the goals, needs, and language heritage of their parents and grandparents.

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End Notes

[1]1Elders are typically holders of traditional cultural knowledge. Not all elderly community members are designated as 'Elders.'

[2]This distribution meant that the sample disproportionately represented rural dwellers, compared to slightly more urban than rural dwellers in the overall population of First Nations in Canada.

[3]Typically, children start saying their first words by about 12 months of age and nearly all of children's speech is understandable by 48-60 months of age (Chapman, 2000).

[4]Participation frameworks are the expectations underlying who can acceptably say something, when, and about what.

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Appendix 1. Elder, Grandparent, and Parent Views on Learning to Talk in Childhood

Note: The purpose of this study is to learn about how to support language development of Indigenous preschool children in ways that Indigenous Peoples think is best. To do this we are seeking the views of Indigenous Elders, grandparents, and parents with young children.

This type of study is important because it will provide a resource for use by Indigenous communities and others to know more about how Indigenous Elders, grandparents, and parents view their children's language development. It will lead to more understanding about how Indigenous Elders and parents think about:

- *how children learn language*
- *how to support children's learning of language*
- *the role of the Mother Tongue and English in their children's learning.*
- *what Indigenous Elders and parents think are strengths and challenges to their children's language learning.*

Overall, it will lead to greater understanding of what Indigenous Elders, grandparents, and parents think their children need to lay the groundwork for their later learning.

Demographic information

1. How old are your children?
2. How old are your grandchildren?
3. What community do you live in?
4. Do you describe the community you live in as urban or rural?
5. Do you live more of your time on or off a reserve?
6. What is your mother tongue (i.e., the language of your ancestors?)
7. What language(s) do you use most of the time?
8. What language(s) do your children use most of the time?

Views Regarding Language Development of Young Children

Notes:

- *The term 'young' refers to babies and children from birth to 5 years old*
- *First language learning follows a developmental progression. The next set of questions has been written to learn about how Indigenous Elders, grandparents, and parents believe young children learn and develop their first language.*
- *Please think about the language most frequently used by your child or the children you are thinking about when answering these questions.*

9. Thinking about childhood, do you think children learn starting from birth and throughout their early years, or does learning really start when they go to school, or what do you think about the timing of children's learning?
10. What do you think are some of the most important kinds of learning that babies and young children do BEFORE they start going to school?
11. What do you think are the most important things that influence whether babies and young children learn all they can before going to school?
12. What do you think are the best ways to help young children in your community to learn?

Learning to communicate with words is part of what babies and young children learn in their early years

13. At what age do you think a child begins to develop the capacity to talk?
14. Do you think that children need help learning to talk?
15. How do you think babies and young children learn to talk?
16. Is there any age when you would become concerned that a child is not talking at all?
17. If so, at what age?
18. How do you think babies and young children learn to understand words?
19. Do you think that young children need help learning to understand words?

'Talkative' is defined as talking a lot when one is engaged with other people.
'Quiet' is defined as talking little when one is engaged with other people.

20. Would you prefer that your child(ren) learn to be 'more on the side of talkative' or 'more on the side of quiet' or do you have any preference? Why?
21. Are there certain situations in which you would like your child(ren) to be talkative? If yes, what are they?
22. Are there certain situations in which you would like your child(ren) to be quiet? If yes, what are they?
23. As a parent, do you think it is your role to be talkative with your child and actively try to encourage your child to be talkative and learn lots of words, or do you think it is your role to be quieter and actively try to encourage your child to be observant without asking many questions or needing to talk a lot?

Views regarding young children's learning in their Mother Tongue and/or English
Note: The term 'young' refers to babies and children from birth to 5 years old

24. Do you think it is more important for young children's learning to occur in their Mother Tongue, English or both Mother Tongue and English (or something else)? Why?
25. Would you like to see more opportunities to help young children's learning in their Mother Tongue? How might this be done?
26. If there were programs to support young children's learning in your community, would you like them to be conducted only in your Mother Tongue, only English or both (or some other combination)? If another combination what is it?
27. Do you think that the kindergarten and grade 1 classes where children in your community start school should include instruction only in your Mother Tongue, only English or both (or some other combination)? If another combination what is it?

Programs to support language development of young children in your community

Note: The term 'young' refers to babies and children from birth to 5 years old

28. Have you accessed any services around early childhood development?
29. If yes, what were the services
30. Were there some things that you liked about the services?
31. Were there some things you didn't like about them?
32. If you didn't access such services, why not?
33. Are there programs that you would like to have in your community to support young children's learning? What kinds of programs?
34. Are there programs you would like to have in your community specifically to get children ready to start school? What kinds of programs?
35. What would make you want to use those programs if they were available?
36. Do you think that programs in your community to give young children opportunities for learning need to be better?
37. What would make them better?
38. How can a non-Indigenous person work with Indigenous children to support language development of any language?
39. Can you think of a non-Indigenous teacher who you think made a positive contribution? What is it that made that person someone you valued and respected?
40. What actions would be most helpful in supporting Indigenous Peoples develop their own ways for supporting young children's learning?

A Resource Kit: To Assist Speech-Language Pathologists and Audiologists in Providing Informed Services to First Nations, Inuit, and Métis People

Une trousse de ressources : pour aider les orthophonistes et les audiologistes à offrir des services éclairés aux Premières nations, aux Inuit et aux Métis

Elizabeth Kay-Raining Bird

KEY WORDS

FIRST NATIONS

INUIT

MÉTIS

SPEECH-LANGUAGE PATHOLOGY

AUDIOLOGY

SERVICE DELIVERY

CULTURAL COMPETENCE

Please Note:

Some of the documents referenced in this article were originally published when SAC was called the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA).

Remarque :

Certains documents cités dans le présent article ont été créés à l'origine lorsque Orthophonie et Audiologie Canada portait la dénomination sociale « Association canadienne des orthophonistes et audiologistes ».

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The purpose of this resource kit is to provide accessible information (e.g., articles, books, websites) that can serve as a critical starting point to assist speech-language pathologists and audiologists in providing culturally and linguistically appropriate services to First Nations, Inuit, and Métis individuals and communities. When I asked Lori Davis-Hill, a First Nations speech-language pathologist practicing on a First Nations reserve in Ontario, what she would put in a resource kit, her response was "The resource I think is most important ... is the personal connections made to the community you work with" (personal communication, October 9, 2012). This seems a critical starting point for a clinician who anticipates they will be working with a person of First Nations, Inuit, or Métis heritage or working in a First Nations, Inuit, or Métis community. They should seek to learn as much as they can about the culture(s) and language(s) of that individual or community. One way to do this is to visit the community and talk to knowledgeable community members directly. Community leaders including elders and people who work in the community can be invaluable resources for a new clinician. Community resource centres such as Friendship, Cultural, or Health centres can be good places to start. Participating in community gatherings (if appropriate) such as pow wows, feasts, and other community events can provide clinicians with opportunities to learn and a forum for understanding a community and developing trust. The internet is also a good source of information. Many First Nations communities, for example, maintain their own community websites that can be searched for information about the history of the community, available services, and events. What follows provides additional information that may prove of assistance. Some of the resources identified are specific to First Nations, Inuit, or Métis people or focus upon a particular language (e.g., Cree) or culture (e.g., Mi'kmaq). Other resources are broadly applicable to linguistically and culturally diverse populations.

The kit is organized into a number of somewhat overlapping areas. The first, Professional Associations, provides resources compiled by professional associations for speech-language pathologists and audiologists in Canada and the United States (US). Next, federal and provincial government websites in Canada provide information about legislation, services, and resources specific to First Nations, Inuit, and Métis under their jurisdictions. After this, the websites of national Aboriginal organizations representing and supporting the work and lives of First nations, Inuit, and Métis are identified. Each organization provides a rich set of historical, cultural, and advocacy information. The last four sections provide resources that provide information about the historical context of Indigenous languages, the health and education of Aboriginal populations, and cultural sensitivity and safety.

To develop the resource kit, I started by working with students in an upper-level graduate class in speech-language pathology that I teach at Dalhousie University. Soon to be hired in their first professional positions, I was interested in what these students felt they needed to know to work effectively and appropriately with First Nations, Inuit, and Métis people. Together we discussed topic areas that should be addressed in a resource kit. They did the preliminary research for the kit. Some of that work can be recognized in the present document, and I gratefully acknowledge all of these students for contributing to this project. Another strategy I used was to ask a number of friends and colleagues across the country to help me identify important resources. Jessica Ball, a well-known researcher at the University of Victoria who has collaborated on many projects with First Nations communities across Canada emailed the following in response to my request. "I would emphasize some reading about: cultural safety, non-standard dialects of English/French, historic trauma, Aboriginal family life - past and present, Aboriginal quality of life and health disparities in general, language learning needs, and goals among Aboriginal people". She followed with a list of possible resources, all of which I have "packed" into this kit.

After reviewing a draft of the final resource kit, Lori Davis Hill wrote: "I think what struck me was that the resources were mostly mainstream. [...] I don't have a compendium of resources or links to give you [....] Just the heartfelt emotion that comes from wanting his-story to be our-story instead.[...] Only through educating mainstream can we improve relationships as we move into the future - and that education isn't always captured in published peer-reviewed literature." Lori suggested that the Idle No More website (**http://idlenomore.ca/**) would add more of an Aboriginal perspective, and I wholeheartedly agreed. In the recent past, the Idle No More movement has brought critical attention to the history of cultural and linguistic genocide perpetrated upon First Nations, Inuit, and Métis in Canada; a history that has directly led to the current plight of Aboriginal people and to severe degradation of the environment. The movement demands that the sovereign rights of Aboriginal nations be recognized and that the Canadian government work with First Nations, Inuit, and Métis towards a more sustainable future. The voices of First Nations, Inuit, and Métis people have been silenced for too long. I certainly do not want this resource kit to contribute to that practice.

The information in this resource kit is not intended to be comprehensive in nature. The resources are considered to be of high quality and proven useful when thinking about service delivery to First Nations, Inuit, and Métis. They provide a beginning point for study and start a learning process that should continue throughout your professional career.

Professional Associations

Many S-LPs and audiologists in Canada are members of Speech-Language & Audiology Canada (SAC), the Canadian Academy of Audiology (CAA), the American Speech-Language-Hearing Association (ASHA), and/or the American Academy of Audiology (AAA). CAA and AAA provide very little information specific to cultural and linguistic diversity on their websites and nothing specific to First Nations, Inuit, or Métis. In contrast, both SAC and ASHA have relevant and useful information. These include codes of ethics, position papers, research evidence, and clinical resources.

Speech-Language & Audiology Canada (SAC)

1. Position papers. Two position papers developed by SAC have particular application to First Nations, Inuit, and Métis. These are the Position paper on speech-language pathology and audiology in the multicultural, multilingual context – CJSLPA, September 1997, http://sac-oac.ca/system/files/resources/multicultural%20multilingual%20contexts%20for%20pdf.pdf and the Position paper on the use of telepractice for SAC speech-language pathologists and audiologists. January 2006, http://sac-oac.ca/system/files/resources/telepractice.pdf

(a) ***Position paper on speech-language pathology and audiology in the multicultural, multilingual context:*** This position paper provides speech-language pathologists and audiologists with guidance around appropriate assessment and intervention practices for individuals from diverse linguistic and cultural backgrounds. While the paper has not been revised since its publication in 1997, it remains largely relevant today. One area that requires current consideration and possible revision is the position on treatment of non-standard dialects. This is described as an optional service. However, several provinces provide funding for schools to provide services to students speaking non-standard dialects, in an attempt to support school success (e.g., the British Columbia English as a Second Language Policy funding framework, BC Ministry of Education, 1999). These services do include speech-language pathologists.

(b) ***Position paper on the use of telepractice for SAC speech-language pathologists and audiologists:*** The use of telepractice is increasing. Remote communities, including many in which First Nations, Inuit, and Métis live, often have reduced access to services. Telepractice is seen as a possible alternative to some more traditional approaches. This position paper recognizes the potential of telepractice, especially when distance, weather, or other factors limit the accessibility of services. The position paper acknowledges that a variety of services can be delivered via teleconference, but it stresses the importance of evidence-based practice and notes that the effectiveness of telepractice may be impacted by cultural beliefs.

The effectiveness of telepractice is no doubt impacted by a variety of factors. For example, Deanne Zeidler, a speech-language pathologist who works in a First Nations community in British Columbia, emphasized (personal communication, April, 2013) that computer equipment, IT support, and internet connectivity are challenges for many remote communities. She added that telepractice in her experience "works best after a strong personal connection and relationship has been established through person contact".

2. Research evidence and clinical resources. In recent years SAC has completed several initiatives aimed at providing information about speech-language pathology and audiology service delivery to First Nations, Inuit, and Métis in Canada to practicing clinicians. The first was to create a Special Interest Group (SIG) where members shared a common interest in providing quality and evidence-based services to First Nations, Inuit, and Métis. This SIG was instrumental in increasing the number of continuing education opportunities around First Nations, Inuit, and Métis service delivery at SAC conferences. Second was the development of a two part special issue on service delivery to these populations. Part 1 of the special issue was published in 2011. This resource kit is a component of Part 2. Third, SAC partnered with Health Canada, the Assembly of First Nations (AFN), and Inuit Tapiriit Kanatami (ITK) to complete a study of service delivery to First Nations, Inuit, and Métis.

(a) ***Special issue.*** Service delivery to First Nations, Inuit, and Métis in Canada, Part 1. *CJSLPA, 35*(2), 106–205. http://209.217.105.25/english/resources/database/files/2011_CJSLPA_Vol_35/CJSLPA_2011_Vol_35_No_02_Summer.pdf

This first of the two-part special issue contains nine articles which together provide reviews of the literature,

overviews of several current service delivery models, a description of a university class developed to provide information in this area, and primary research articles on service delivery and the effectiveness of funding for non-standard dialect users in British Columbia. The current special issue includes this resource kit, an article on speech and language assessment of First Nations, Inuit, and Metis children, a research article on narratives of First Nations children, and several descriptions of current service delivery models.

(b) ***Research reports.*** SAC(2011). Reports from the SAC Project on Speech, Language and Hearing Services for First Nations, Métis, and Inuit. *Speech, language, and hearing services for First Nations, Métis, and Inuit Children in Canada with a focus on children 0-6 years of age*.http://sac-oac.ca/professional-resources/resource-library/speech-language-and-hearing-services-first-nations-inuit-and.

These three reports resulted from a SAC project funded by Health Canada and conducted in collaboration with AFN and ITK. The purpose was to study the accessibility and availability of S-LP and audiology services for children of First Nations, Inuit, and Métis heritage in Canada. The reports provide a wealth of information about current practice, services, and barriers to the access and/or up-take of those services. The first report summarizes findings from a comprehensive literature review. Interviews with many people who are active in the field were conducted. Literature from Canada, the United States, Australia, and New Zealand was reviewed. The second report presents the findings from a survey of Canadian practitioners and overviews current practice in services to First Nations, Inuit, and Métis. The third and final report draws conclusions from the previous two and makes recommendations to SAC regarding how to improve service delivery to First Nations, Inuit, and Métis in Canada.

The American Speech-Language-Hearing Association (ASHA)

1. Multicultural Affairs and Resources: http://www.asha.org/practice/multicultural/

ASHA has compiled resources relevant to culturally and linguistically diverse populations under a single node of its website: Multicultural Affairs and Resources. Here the clinician can find an extensive array of information relevant to diversity and service delivery to diverse populations. Included are links to position statements and guidelines developed by ASHA, articles, books, webinars, materials, and other web resources. Issues of cultural competence and safety, cultural diversity and differences, speech and language development in diverse populations, and culturally sensitive assessment and intervention procedures are addressed. Because of the distinct cultural context in the US, many resources focus upon Hispanic or African American populations. ASHA also provides opportunities to join two SIGs that focus upon diversity (http://www.asha.org/SIG/): SIG14, Communication Disorders and Sciences in Culturally and Linguistically Diverse Populations, and SIG17, Global Issues in Communication Sciences and Related Disorders. Each publishes a newsletter containing articles that can be used for continuing education credit for ASHA certification.

Government Sites

Canada, Federal

1. Aboriginal Affairs and Northern Development Canada (AANDC) - http://www.aadnc-aandc.gc.ca/eng/1100100010002

Aboriginal Affairs and Northern Development Canada (AANDC; previously Indian and Northern Affairs) is the Canadian Ministry whose mandate is to support First Nations, Inuit, and Métis throughout Canada, as well as all people living in northern Canada. Its mandate is threefold: a) improve social well-being and economic prosperity, b) develop healthier, more sustainable communities; and c) assist fuller participation in Canada's political, social, and economic development. AANDC is responsible for ensuring that the Canadian government's legal obligations, as mandated in the *Indian and Inuit Affairs* (derived from the *Indian Act* http://laws.justice.gc.ca/eng/acts/I-5/) and *Northern Development* documents, are met. The site provides information about, for example, health, well-being, and education as well as links to related sites. Summaries of various issues of current or historical interest and position and action papers are provided with contact information supplied should one wish to have additional information on a topic. Maps found at the Connectivity for Aboriginal and Northern Communities in Canada node (http://www.aadnc-aandc.gc.ca/eng/1352214337612/1353504776242?utm_source=connectivity&utm_medium=url) provide an overview of First Nations, Inuit, and Metis communities in each province and territory. Links to community websites as well as Statistics Canada and other governmental information is available for many of the communities. A child-friendly component of the site has been developed with useful resources for educators and other professionals.

2. Health Canada

The First Nations and Inuit Health node(http://www.hc-sc.gc.ca/fniah-spnia/index-eng.php) on the Health Canada website provides information about the services funded and provided by Health Canada: health promotion and prevention, home and community care, and non-insured benefits (i.e., those not covered under the *Indian Act*). Of particular interest to S-LPs and Audiologists are the Aboriginal Head Start On-reserve (AHSOR) programs (http://www.hc-sc.gc.ca/fniah-spnia/famil/develop/ahsor-papa_intro-eng.php). Health Canada has developed standards that are applied to all programs it funds. As the name indicates, Health Canada only funds Head Start programs on reserves. Not all reserves have Head Start programs.

3. Public Health Agency of Canada

This agency funds and oversees the Aboriginal Head Start in Urban and Northern Communities (AHSUNC) programs (http://www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/ahsunc-papacun/). As the name indicates, these programs are located off-reserve and are intended to serve First Nations, Inuit, and Métis in urban and northern settings. Not all eligible communities have a Head Start program. For example, in Nova Scotia there is only one AHSUNC program, in Halifax.

4. Statistics Canada

Census data specific to First Nations, Inuit, and Métis is collected by Statistics Canada every five years, most recently in 2011. Aboriginal groups have long expressed concern about the representativeness of these data as many individuals do not or cannot fill out the forms. This problem will only increase as the mandatory census long form was replaced by an optional survey in 2011. Analyses of census data are made available as they are completed. A report on Aboriginal languages using 2011 data can be found on http://www12.statcan.gc.ca/census-recensement/2011/as-sa/98-314-x/98-314-x2011003_3-eng.cfm. The most recent overview of census data on Aboriginal populations in Canada is found at http://www12.statcan.ca/english/census06/analysis/aboriginal/pdf/97-558-XIE2006001.pdf. The full reference for this document is: Ministry of Industry (2008). Aboriginal peoples in Canada in 2006: Inuit, Métis, and First Nations, 2006 Census. Statistics Canada, Catalogue no. 97-558-XIE.

In addition to census data, Statistics Canada has collaborated with Aboriginal advisors and stakeholder groups to develop and analyze the 2006 Aboriginal People's Survey (APS; children = under 6 years, youth = 6 to 14 years, and adults = over 14 years) and the 2006 Aboriginal Child's Survey (ACS) which collect extensive data on First Nations, Inuit, and Métis in Canada specifically. The 2006 profile of Aboriginal Children, Youth, and Adults (updated in 2011) used APS data and can be found at http://www12.statcan.ca/census-recensement/2006/dp-pd/89-635/. Language outcomes of Aboriginal children were recently analyzed using the ACS http://www.statcan.gc.ca/pub/82-003-x/2013001/article/11765-eng.pdf. Approximately 13% of First Nations children off reserve, 12% of Métis children, and 7% of Inuit children between the ages of 2 and 5 were reported to have speech or language difficulties by their caregivers. The full reference for this report is: Findlay, L. C., & Kohen, D. E. (2013). Measures of language outcomes using the Aboriginal Children's Survey. Statistics Canada, Catalogue no. 82-003-X, *Health Reports*, 24(1), 10-16. Another analysis of interest is *Inuit children in Canada* (2008). It can be accessed at (http://www.statcan.gc.ca/pub/89-634-x/89-634-x2008004-eng.pdf).

Provincial and territorial websites

Many but not all provinces and territories have a ministry or governmental department that is responsible for providing services and supports for First Nations, Inuit, and/or Métis people. Under each of these ministries or departments information about and for Aboriginal people is provided. Content varies across sites, reflecting local needs, initiatives, and interests. Common topics include language, culture, social initiatives, education, health, economic development, and land treaties. The amount of information supplied on a given site appears to vary in proportion to the size of a province's or territory's Aboriginal, Métis, and/or Inuit population. Sites include:

3. The Ministry of Aboriginal Relations and Reconciliation, British Columbia http://www.gov.bc.ca/arr/.
4. The Ministry of Intergovernmental, International, and Aboriginal Relations, Alberta http://www.aboriginal.alberta.ca/.
5. The Ministry of First Nations and Métis Relations, Saskatchewan http://www.fnmr.gov.sk.ca/.
6. The Ministry of Aboriginal and Northern Affairs, Manitoba http://www.gov.mb.ca/ana/.
7. The Ministry of Aboriginal Affairs, Ontario http://www.aboriginalaffairs.gov.on.ca/english/default.asp.

8. Secrétariat aux affaires autochtones, Quebec http://www.autochtones.gouv.qc.ca/programmes_et_services/programmes_services_en.htm.
9. Ministry of Aboriginal Affairs, New Brunswick http://www2.gnb.ca/content/gnb/en/departments/aboriginal_affairs.html.
10. Office of Aboriginal Affairs, Nova Scotia http://www.gov.ns.ca/abor/.
11. Aboriginal Affairs Secretariat, Prince Edward Island http://www.gov.pe.ca/aboriginalaffairs/.
12. Intergovernmental and Aboriginal Affairs Secretariat, Newfound Land and Labrador http://www.laa.gov.nl.ca/laa/.
13. Ministry of Aboriginal Affairs and Intergovernmental Relations, Northwest Territories http://www.daair.gov.nt.ca/_live/pages/wpPages/home.aspx.
14. There does not appear to be a Department that deals directly with Aboriginal Affairs in the Yukon although there is a section on the government website devoted to Aboriginal services: http://www.gov.yk.ca/services/people_aboriginal.html.
15. The Territory of Nunavut is unique in that it was formed in response to land settlement agreements between the Inuit and the Canadian federal government. Nunavut separated from the Northwest Territories and formed its own territory and government in 1999. All departments within the Nunavut government serve the Inuit directly http://www.gov.nu.ca/en/Departments.aspx. Of particular interest to the present discussion is the Department of Culture, Language, Elders, and Youth http://www.cley.gov.nu.ca/index.html which can be accessed in English, French, or the Inuit language.

First Nations, Inuit, and Métis Organization Websites

Inuit Tapiriit Kanatami (ITK) http://www.itk.ca/

Inuit Tapiriit Kanatami (ITK) is the national Inuit organization of Canada. It represents four Inuit communities on an array of environmental, socio-cultural, and political issues. The four communities are Inuvialuit Settlement Region in the Northwest Territories, Nunavut, and Nunavik in northern Quebec, and Nunatsiavut in Northern Labrador. Content is in English. A considerable amount of historical information as well as information about current initiatives is provided on the website. Links to publications such as the National Strategy on Inuit Education (2011) http://www.itk.ca/publication/national-strategy-inuit-education and Health and Indicators of Inuit Nunangat within the Canadian Context (2010) http://www.itk.ca/publication/health-indicators-inuit-nunangat-within-canadian-context are available in English and the Inuit language.

Assembly of First Nations Canada (AFN) http://www.afn.ca/

The Assembly of First Nations (AFN) is the national representative body for the over 630 First Nations across Canada. The AFN secretariat or governing body is made up of leaders of First Nations and engages in planning and advocacy activities focusing upon cultural preservation and cultural growth. AFN seeks to present the views of First Nations on issues of common interest. These include treaty rights, land claims, economic and social development, health, education, languages, and literacy. AFN works collaboratively with Aboriginal elders, women's, and youth groups. The website provides much of interest, including contact information for provincial and territorial First Nations organizations (http://www.afn.ca/index.php/en/about-afn/provincial-territorial-organizations) and information related to each of the policy areas in which AFN is active (http://www.afn.ca/index.php/en/policy-areas). Extensive information about current events relevant to First Nations communities is provided. The site is navigable in both English and French.

Métis National Council (MNC): http://www.metisnation.ca/

The Métis National Council (MNC) represents the interests of the Métis nationally and internationally. Members are the democratically elected leaders of Métis organizations across Canada (from Ontario west). Its goal is to "secure a healthy space" for the Métis in Canada. The website provides links to a number of portals which provide information relevant to the Métis. The Métis Nation Constitutional Reform portal documents Métis' history and their long struggle for recognition and rights (http://www.metisportals.ca/cons/). Others include the Métis Rights Portal (http://metisportals.ca/MetisRights/wp/), the Métis Nation Health/Well Being Research Portal (http://www.metisportals.ca/healthportal/) and the Métis NationHealingGateway(http://metisportals.ca/metishealing/).

History and its Impact

1. Urban Aboriginal People's Study http://www.uaps.ca/

The Urban Aboriginal People's Study was an "enquiry

about the values, experiences, identities, and aspirations of urban Aboriginal peoples" and was intended to be an alternative to deficit-oriented reports that often focus upon problems experienced by urban Aboriginal people. The study involved face-to-face interviews with 2614 First Nations, Inuit, and Métis living in 11 cities across Canada. The interviews addressed a wide range of topics including urban Aboriginal identity and culture, experiences with non-Aboriginal people, and political identity and engagement. Non-Aboriginal Canadians' perceptions and beliefs about First Nations, Inuit, and Métis were also explored through 2501 phone interviews. The report also includes a summary of findings from interviews with 100 National Aboriginal Achievement Foundation (NAAF) scholars in which issues and experiences regarding post-secondary education were explored. The full report of this project was completed in 2010 and is available on-line in English (**http://uaps.ca/wp-content/uploads/2010/03/UAPS-Main-Report_Dec.pdf**) and French. Reports for individual cities are also available.

2. Long, D., & Dickason, O. (2000). *Visions of the heart: An introduction to Canadian Aboriginal issues*, (2nd ed.). Toronto: Harcourt Brace. This is an edited volume recommended by Jessica Ball. The book covers a range of topics such as health, education, and the roles of Elders. Many of the chapter authors are Aboriginal. Kim Anderson and Jessica Ball wrote one of the chapters called Foundations, on First Nations and Métis families, which provides a historical and contemporary overview of strengths, challenges, and promising ways forward.

3. Paulette Regan, *Unsettling the Settler Within* **http://www.ubcpress.ca/search/title_book.asp?BookID=299172936**

This book was a doctoral dissertation. Jessica Ball suggested its inclusion in the resource kit as "it brings S-LPs right up to date with current constructions of what it might mean to be non-Indigenous in Canada today. The book advances the construction of non-Indigenous people living in Canada as settlers or descendents of settlers... a contested and evocative term that is certainly gaining popularity out here in BC." Jessica goes on to state: "Recently I received a teaching from an Indigenous colleague here at UVic, who encouraged us non-Indigenous practitioners and researchers to find out what is the word for 'settler' in the local Indigenous language, wherever you are working. There are some interesting terms in various languages, such as land-eaters, the suddenly appearing ones, and people who come from on the sea. It is a quest that can lead to a personal recognition and public acknowledgement of one's geo-cultural location while acknowledging the need to be taught something from the local speech community."

4. Indigenous studies portal **http://iportal.usask.ca/**.

This website was developed by the University of Saskatchewan Library. It has compiled a broad array of electronic information to support Indigenous Studies. The information is not Canada-specific; rather it provides information about Indigenous issues world-wide. As of 2011 the portal had 25,000 records including publications, media, art work, and other resources available. The website is searchable via topics or keywords. Tutorials are provided to help users search more effectively.

Aboriginal Languages

Structure of Aboriginal languages and second-language learning resources

In 1998 Mary Jane Norris published an important analysis of Aboriginal language use in Canada and concluded that most indigenous languages in Canada were endangered. She identified three languages that showed continued vitality from her analyses: the Inuit language, Ojibway, and Cree. Recently many communities and organizations have focused efforts upon developing language resources to counteract observed declines in the health of Aboriginal languages and to support learning of those languages. The resources in this section are certainly not comprehensive, but provide a sampling of some of the important efforts being made in this area. Most of the resources identified have as their focus one or more of the three Aboriginal languages Norris identified in 1998 as still vital. The projects are often a collaboration between First Nations, Inuit, or Métis communities and university-based researchers.

1. Multiple language resources

First Voices **http://www.firstvoices.com/**. First Voices is a website devoted to teaching and documenting First Nations' languages. Languages can be accessed through an interactive map or drop down menus. For each language, information is provided about the language family, communities that speak the language, and descriptions of written and spoken language systems. Audiofiles illustrate the pronunciation of phonemes, words, and phrases in each language. A dictionary of words and phrases and descriptions of the syntax of each language is also provided. As well, there are interactive games that can be used to help learn aspects of each language. The amount of information available varies across languages because the website is built up through the contributions of volunteer organizations and individuals.

2. The Inuit Languages

(a) The Inuktitut Living Dictionary http://www.livingdictionary.com/ is a computer-based dictionary available through the Nunavut Government website. The Living Dictionary provides translations of words and phrases from the Inuit language using either syllabics or roman orthography to English or French and vice versa. Translations include dialectal alternatives of the Inuit language.

(b) The Nunavut Government website provides Computer Tools for use in word processing in the Inuit language http://www.cley.gov.nu.ca/en/ComputerTools.aspx.

(c) Dorais, L. J. (2010). *The language of the Inuit: Syntax, semantics, and society in the Arctic*. Montreal, QC: McGill-Queen's University Press. This book is based on 40 years of research conducted by Louis-Jacques Dorais, a Canadian anthropologist and linguist who lived and worked among the Inuit people of Canada, Alaska, and Greenland. The book covers three main topics: where geographically the language is used and its linguistic structure and dialectal variants, the history of the language and its meaning, and the current cultural and sociolinguistic context of Inuit language use.

3. Anishinaabe (Ojibwe) and Cree Languages

(a) Cree Language Resource Project (http://www.creedictionary.com)

The Cree Language Resource Project is a collaboration of the Miyo Wahkohtowin Community Education Authority and Earle Waugh (University of Alberta). The goal of the project is to promote Cree language learning and use. An interactive web-based dictionary has been developed for use with three Cree dialects (Maskwacis Plains Cree, Saskatchewan Plains Cree, and Woods Cree). The dictionary is searchable in English or Cree. Cree words can be written using roman letters or syllabics and a converter is available to change the written form. Fonts for Cree syllabics are downloadable from the website. A child's version of the dictionary is available as are links to other resources.

(b) The East Cree.org web site (www.eastcree.org)

The Cree Living Language Encyclopedia Project, the Interactive Cree Language Project, and the eastcree.org web site result from a collaborative effort between the Cree School Board in the James Bay area, Marie-Odile Junker (Carleton University, Ontario), Marguerite MacKenzie (Memorial University, Newfoundland), and other organizations and individuals in the James Bay area. The projects aim to involve youth and speakers of Cree and Innu in the James Bay area in documenting the East Cree and Innu languages, thereby building capacity in the local community and maintaining and vitalizing the languages there. Additionally, the projects seek to develop technology and use it in a culturally appropriate manner. The eastcree.org site is in three languages (Cree, English, and French). The site offers a searchable online East Cree dictionary, a detailed description (with examples) of the grammar of two dialects of East Cree, a phonological overview, and information about the syllabic writing system of East Cree. For each component of the website, audio examples are provided. Lessons for use by teachers are provided including *Comparative Structures of East Cree and English* (2012) by Marie-Odile Junker, Marguerite MacKenzie, and Julie Brittain http://www.eastcree.org/pdf/Cree_English_Structure_2012.pdf which provides a detailed comparative analysis of the grammatical systems of East Cree and English. Recordings of Cree stories told in Cree are provided, some with written versions to allow the listener to read along with the recordings.

(c) Weshki-ayaad. Anishinaabemowin Ojibwe Language http://weshki.atwebpages.com/index.html

This website provides an overview of the Anishinaabe (Ojibwe) language and resources for learning it. The Minnesota Ojibwe dialect is the primary focus, although there are some materials provided for the Manitoba Ojibwe dialect as well. The website includes a dictionary and sections about grammar, lessons to teach aspects of Anishinaabe, and materials in the language. No audio files accompany these resources. The website provides an extensive selection of links to resources about the Ojibwe language including FreeLang.Net (http://www.freelang.net/dictionary/ojibwe.php) which provides translation from English to a number of Aboriginal languages.

(d) Ontario Ministry of Education. (2002). Resource guide. *The Ontario curriculum grades 1 to 12. Native languages: A support document for the teaching of language patterns, Ojibwe and Cree*. http://www.edu.gov.on.ca/eng/document/curricul/ojibwe.pdf

Prepared for the Ontario Ministry of Education by Keith Lickers, Catherine Price (Ministry of Education), and John

Nichols (University of Manitoba), this guide provides a detailed description of the linguistic structure of Ojibwe and Cree, two First Nations languages spoken throughout Ontario. Both morphology and syntax are addressed, and examples are provided in several Ojibway dialects (Central Ojibwe-Odawa, Western Ojibwe) and one Cree dialect (Swampy Cree). The guide is used as a resource for teachers in primary and secondary schools in Ontario.

4. Other languages

a) Jilaptoq Mi'kmaw Language Center
http://www.jilaptoq.ca/en/index.html

The Jilaptoq Mi'kmaw Language Center is a multimedia site that was originally developed to support the Nova Scotia Department of Education's 7th grade Mi'kmaw curriculum although the materials provided on-line are intended to support efforts to teach or learn Mi'kmaw more broadly as well. The site provides a Mi'kmaw-English dictionary and audio tapes of the sound system.

Aboriginal English dialects

First Nations people often speak a variety (dialect) of English that has been influenced by a First Nations language, even when English is their first language. The nature of these dialects and how to work with children who speak Aboriginal varieties of English has been a focus of interest in recent years.

1. Ball, J., & Bernhardt, B.M. (2008). First Nations English dialects in Canada: Implications for speech-language pathology. ***Clinical Linguistics & Phonetics, 22***(8), 570-588.

Ball and Bernhardt explore the historical emergence of First Nations varieties of English in Canada and the importance of these dialects to their speakers. The authors then go on to model a comparative method for determining in what ways English might be affected by several First Nations languages. The intent is to help speech-language pathologists understand how to differentiate between language patterns that are a typical part of a community's way of speaking and patterns that may reflect language learning problems.

Language revitalization

1. The Assembly of First Nations National First Nations Language Strategy, adopted by the General Assembly (July, 2007) and the Assembly of First Nations National First Nations Languages Implementation Plan, prepared by R. A. MacDonald (2007).

These two documents, the National First Nations Languages Strategy (http://www.afn.ca/uploads/files/education/languagesnationalstrategy2007.pdf), and its companion document, the National First nations Languages Implementation Plan (http://www.ohchr.org/Documents/Issues/IPeoples/EMRIP/StudyLanguages/AssemblyFirstNations5.pdf) provide a roadmap and plan for reversing the pattern of Canadian Aboriginal language loss. The documents explain the importance of Aboriginal languages to Aboriginal communities, the current absence of legislation that protects Aboriginal languages (as exists for English and French), and the history of systematic language destruction perpetrated by the Canadian government on Aboriginal people. They provide a detailed pathway for language revitalization through research, curricular development, information dissemination, language updating and modernization, language maintenance activities, on-going language testing, and language skill certification.

2. The Canadian Indigenous Languages and Literacy Development Institute, http://www.cilldi.ualberta.ca/.

The Canadian Indigenous Languages and Literacy Development Institute (CILLDI) is an initiative of the Faculties of Arts, Education, and Native Studies at the University of Alberta in Edmonton. It began as a collaboration of Indigenous language researchers and community activists, inspired by the American Indian Language Development Institute (AILDI, http://aildi.arizona.edu/revitalization) at the University of Arizona. Its purpose is to support the preservation and revitalization of Indigenous languages. The key mechanism for doing so is a month-long language institute held each summer and designed to provide linguistic and educational training to speakers of Indigenous languages. The institute seeks to provide the tools needed for attendees to return to their communities and work to save their languages from extinction. University credit is given for classes and some lead to a Community Linguist Certificate.

Child Language and Literacy

Very little has been published on language development in First Nations, Inuit, or Métis children in Canada. In this section I have included resources specific to First Nations, Inuit, or Métis and others that are more generally applicable.

Language and literacy development

1. The online encyclopedia of the Canadian Language and Literacy Research Network (CLLRNet) includes

a section on language and literacy development in Aboriginal children, edited by Jessica Ball (http://literacyencyclopedia.ca/index.php?fa=section.show&sectionId=21). Also of interest in the CLLRNet encyclopedia is an article on literacy development in Aboriginal children by Patrick Walton (http://literacyencyclopedia.ca/index.php?fa=items.show&topicId=309). Contributions to these sections of the encyclopedia were made between 2006 and 2012. Unfortunately, with the loss of network funding these resources are no longer being updated.

2. Jessica Ball and Alan Pence published an excellent book in 2006 entitled *Supporting Indigenous children's development* (Vancouver: UBC Press). This book provides a roadmap for working collaboratively, sustainably, and in a culturally appropriate manner with First Nations communities to support the development of young children. Several examples of projects that have developed through the use of their "generative model" of collaboration are described.

3. Martha Crago co-authored the SAC position paper on service delivery to culturally and linguistically diverse populations. She and her colleagues have done ground-breaking research on the acquisition of Inuktitut, bilingual language acquisition, and bilingualism in children with specific language impairment. Many of these articles and book chapters are downloadable from Martha Crago's profile on the Dalhousie University website.

Bilingualism

The books and chapters listed below are not specific to children of First Nations, Inuit, or Métis heritage. However, they are excellent general resources for learning about bilingualism and discussing issues of bilingualism and cognitive or language disorders.

1. De Houwer, A. (2009). *Bilingual first language acquisition.* Toronto, ON: Multilingual Matters.
2. Goldstein, B. A. (2012). *Bilingual language development and disorders in Spanish-English Speakers* (2nd edition). Baltimore: Brookes Publishing.
3. Kay-Raining Bird, E. (2006). The case for bilingualism in children with Down Syndrome. In R. Paul (Ed.), *Language disorders from a developmental perspective: Essays in honor of Robin S. Chapman* (pp. 249 – 275), Mahwah, NJ: Lawrence Erlbaum Associates.
4. Kohnert, K. (2013). *Language disorders in bilingual children and adults* (2nd edition). San Diego: Plural Publishing.
5. Paradis, J., Genesee, F., & Crago, M. (2011). *Dual language development and disorders* (2nd edition). Baltimore, MD: Paul H. Brookes.

Health

Cultural Safety

Historic and current colonial and racist practices have profoundly harmed First Nations, Inuit, and Métis communities and people. In attempting to act in a culturally safe manner, individuals seek to understand cultural variation, history from multiple viewpoints, and the impact of power differentials. The intent is to reduce the potential for harm and increase the possibility for positive collaborative interactions between people and communities.

1. Modules on Cultural Safety, the University of Victoria

There have been a number of excellent training tools developed to teach cultural safety. The three modules developed by the University of Victoria are one example. The first module (http://web2.uvcs.uvic.ca/courses/csafety/mod1/) explores the relationship between colonialization and health of Aboriginal peoples in Canada. The second addresses power and privilege and experiences with repression (http://web2.uvcs.uvic.ca/courses/csafety/mod2/) while the third (http://web2.uvcs.uvic.ca/courses/csafety/mod3/) discusses the intersect between colonialization, health care practices, and health and health practices.

Overviews of Health

1. Blueprint on Aboriginal Health, a Transformative Plan. http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/2005-blueprint-plan-abor-auto/plan-eng.pdf

This document was prepared collaboratively in 2005 by federal, provincial, and territorial governments and leaders of national Aboriginal organizations. The document outlines a ten-year plan to effect positive growth in the health outcomes of Aboriginal people in Canada through improvement of access and the quality of health care services and a focus upon population health strategies that impact the social determinants of health such as poverty. A traditional wholistic view of health is used. The intent is to provide guidelines for future work completed at federal and provincial/territorial levels. Frameworks are outlined separately for First Nations, Inuit, and Métis. Each framework addresses issues of: delivery and access, sharing improvements in the health care system, promoting health and well-being, developing on-going collaborative working relationships, clarifying roles and responsibilities, and monitoring progress.

2. The National Aboriginal Health Organization (NAHO) http://www.naho.ca/

Until recently, NAHO was an Aboriginally-controlled nonprofit organization, funded by the federal government of Canada. A complete funding cut to NAHO was announced by the federal government of Canada on April, 2012; its work ended on June 29, 2012 but the website will remain open until 2017. NAHO was governed by a Board of directors appointed from or elected by its four member organizations (Congress of Aboriginal Peoples, ITK, MNC, and Native Women's Association of Canada). NAHO's mandate was to promote the health and well-being of First Nations, Inuit, and Métis in Canada through research and knowledge mobilization. NAHO published the peer-reviewed free-access *Journal of Aboriginal Health*. Publications are easily searched on the website. Topics include many areas relevant to speech-language pathologists and audiologists including aging, children's health and welfare, cultural competency and safety, social determinants of health, Fetal Alcohol Spectrum Disorder, and traditional knowledge.

3. Network Environments for Aboriginal Health Research, http://www.cihr-irsc.gc.ca/e/27071.html

Launched in 2007 and funded through the Institute of Aboriginal Peoples' Health within the Canadian Institutes of Health Research, the Network Environments for Aboriginal Health Research (NEAHR) includes seven regional centres across Canada and two national centres. Their mandate is to develop a network of supportive research environments to increase capacity in Aboriginal health research, to train Aboriginal health researchers, and to investigate determinants of Aboriginal health. The Aboriginal Health Research Networks Secretariat (AHRNET) is the coordinating body of the nine centres (http://ahrnets.ca/database/) and its website links to each of the nine centres and through them many resources of interest to practitioners such as the Aboriginal Health Resource Directory (http://ahrnets.ca/database/data/fid/3/) and the open-access peer-reviewed journal Pimwatisiwin, *A Journal of Aboriginal and Indigenous Health* (http://www.pimatisiwin.com/online/).

Social determinants of health

1. Loppie Reading, C., & Wien, F. (2009). Health inequalities and the social determinants of Aboriginal peoples' health. *National Collaborating Centre for Aboriginal Health*, 1-40. Available online http://www.nccah-ccnsa.ca/docs/social%20determinates/NCCAH-Loppie-Wien_Report.pdf

This review article carefully examines the impact of social determinants on the health and well-being of First Nations, Inuit, and Métis people. Social determinants are divided into those that are proximal, intermediate, and distal to the individual. For example, proximal factors have a direct effect on the health of individuals and include behaviors such as smoking, the physical environment such as housing, and education. Intermediate factors are considered the origins of proximal factors and include characteristics of the health care systems and educational system in a community. Distal factors on the other hand, are the social, political, and economic factors that have led to the intermediate and proximal social determinants of health and include the history and current practice of colonialism and racism perpetrated upon Aboriginal communities.

2. Inuit Tapiriit Kanatami (2007). Social determinants of Inuit health in Canada: A discussion paper; 1–29. Available on-line http://ahrnets.ca/files/2011/02/ITK_Social_Determinants_paper_2007.pdf

This discussion paper was published in 2007 by the national Inuit organization of Canada. The paper overviews the current status of health of Inuit people in Canada, discusses how social determinants influence Inuit health, and proposes self-determination as a path to improving the health of Inuit people. The social determinants of health considered are those classified as proximal or intermediate by Loppie Reading and Fein (2009).

3. McIvor, O., Napolean, A., & Dickie, K. M. (2009). Language and culture as protective factors for at-risk communities. *Journal of Aboriginal Health, 5*, 6-25.

This article reports on a comprehensive review of the literature.

4. Stephenson, P., Elliott, S., Foster, L., & Harris, J. (Eds.) (1995). *A persistent spirit: Towards understanding aboriginal health in British Columbia*. Victoria, BC: University of Victoria.

Jessica Ball recommended this book be included in the resource kit. In particular, she suggested the first chapter by Acheson, S., Cultural contact, demography and health among the aboriginal peoples of British Columbia (pp. 1-42), provides important insights.

Education

1. National Panel on First Nation elementary and secondary education for students on reserve (2012). Nurturing the learning spirit of First Nation students: The report of the National Panel on First Nation elementary and secondary education for students on reserve http://firstnationeducation.ca/wp-content/themes/clf3/pdfs/Report_02_2012.pdf.

This report was written by Scot Haldane, George Lafond, and Caroline Krause, a national panel of experts struck to assess the state of elementary and secondary education in First Nations communities and to make recommendations to government. The panel's primary recommendation was to develop a strong First Nations education system, the structural elements of which they identified as:

- "a child-centered *First Nation Education Act* that outlines the roles and responsibilities of each partner in the system and establishes and protects the First Nation child's right to a quality education;
- education services and supports for schools, educators, and students provided by national and regional organizations that are designed and delivered by First Nations;
- strong partnerships and mutual accountability between First Nation and provincial schools and education organizations;
- statutory funding that is needs-based, predictable, and sustainable; accountability for the use of funds for education purposes and the achievement of successful outcomes for First Nation students must be tied to this new approach to funding." (p. 31). Their recommendations present a thoughtful and useful way forward for the education of First Nation children and youth.

2. Early Childhood Development Intercultural Partnerships, www.ecdip.org

The team leader of Early Childhood Development Intercultural Partnerships (ECDIP) is Jessica Ball. The goal of ECDIP is to engage in respectful, ethical, and culturally safe collaborative research relationships that positively impact the health and development of Indigenous children by bringing together indigenous communities and researchers from the University of Victoria. A number of research collaborations are currently on-going including studies of Indigenous fathers, early childhood assessment, and First Nations English dialects. Jessica Ball and her colleagues have published extensively and the site contains a comprehensive list of those publications, many of which are downloadable. Areas addressed by these publications include: early intervention, screening and assessment, language learning, and ethical considerations. Extensive links to other relevant information are also provided.

3. Canadian Council on Learning (2009). *The state of Aboriginal learning in Canada: A holistic approach to measuring success.* Ottawa, ON: Canadian Council on Learning. http://www.ccl-cca.ca/pdfs/StateAboriginalLearning/SAL-FINALReport_EN.PDF

This report presents the first application of a framework for assessing the learning outcomes of First Nations, Inuit, and Métis over the lifespan. The framework is based upon lifelong learning models developed in 2007 by the Canadian Council of Learning and are intended to provide an alternative and more accurate picture of Aboriginal learning, as previous measures are deficit oriented, do not take social and economic determinants of learning into account and are not derived from an Aboriginal vision of learning. The framework includes three components: sources and domains of knowledge, the lifelong learning journey, and community well-being.

4. Costantino, M., & Hurtado, D. (2006). Northwest Native American reading curriculum. *Journal of American Indian Education, 45*, 45-49. This article is available at http://jaie.asu.edu/v45/45_2_%202006%207%20Costantino%20_%20Hurtado.pdf. It provides a brief but excellent overview of the principles underlying an evidence-based, culturally appropriate, interdisciplinary curriculum designed to teach reading to Native American and non-Native American children in the US. Story-telling and re-telling is recognized as a cultural practice and these activities are incorporated throughout the curriculum. The curriculum has been implemented in schools throughout Washington State. The curriculum is based on extensive work done by William Demmert and colleagues. A literature review published in 2006 by Demmert, Grissmer, and Towner provides useful background information for the curriculum http://jaie.asu.edu/v45/45_3_%202006%202%20Demmert%20et%20al.pdf. Inglebret and colleagues used many of the principles discussed by Constantino and Hurtado to develop a shared storybook intervention. Interventions of this type are of considerable interest to speech-language pathologists working with young First Nations, Inuit, and Métis children in Canada. The full reference for this article is: Inglebret, E., Jones, C., & Pavel, D. M. (2008). Integrating American Indian/Alaska Native culture into shared storybook intervention. *Language Speech and Hearing Services in the Schools, 39*, 521–527.

Conclusions

This resource kit provides a sampling of the relevant and helpful information that is currently available. It is hoped that this information will inspire practitioners to engage in a process of life-long learning in order to provide culturally relevant and culturally appropriate speech, language, and audiology services to First Nations, Inuit, and Métis in Canada. Providing services of this type is not a simple task, but it is imperative that we struggle to accomplish this goal. Towards this end, we must work

to identify, evaluate, and share the quality information currently available and also work to expand the evidence base through continued research efforts.

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Authors' Notes

The internet links in this article were current at the time of publication, but owing to changes in the world-wide web, may change post-publication.

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Along with copies of the manuscript, a cover letter indicating that the manuscript is being submitted for publication consideration should be included. The cover letter must explicitly state that the manuscript is original work, that it has not been published previously, and that it is not currently under review elsewhere. Manuscripts are received and peer-reviewed contingent upon this understanding.

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All copies should be typed, double-spaced, with a standard typeface (12 point, non-compressed font) on 8 ½ x 11 paper size. All margins should be at least one (1) inch. An electronic copy of the manuscript should be submitted directly to the editor. Author identification for the review process is optional; if blind-review is desired, the documents should be prepared accordingly (cover page and acknowledgements blinded). Responsibility for removing all potential identifying information rests solely with the author(s). All submissions should conform to the publication guidelines of the most current edition of the Publication Manual of the American Psychological Association (APA), 6th Edition. The APA manual is available from most university and commercial bookstores. Generally, the following sections should be submitted in the order specified.

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Abstract: On a separate sheet of paper, a brief yet informative abstract that does not exceed one page is required. The abstract should include the purpose of the work along with pertinent information relative to the specific manuscript category for which it was submitted.

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As part of the submission process, the author(s) must explicitly identify if any potential conflict of interest or dual commitment exists relative to the manuscript and its author(s). Such disclosure is requested so as to inform CJSLPA that the author or authors have the potential to benefit from publication of the manuscript. Such benefits may be either direct or indirect and may involve financial and/or other non financial benefit(s) to the author(s). Disclosure of potential conflicts of interest or dual commitment may be provided to editorial consultants if it is believed that such a conflict of interest or dual commitment may have had the potential to influence the information provided in the submission or compromise the design, conduct, data collection or analysis, and/or interpretation of the data obtained and reported in the manuscript submitted for review. If the manuscript is accepted for publication, editorial acknowledgement of such potential conflict of interest or dual commitment may occur within the publication.

Participants in Research Humans and Animals

Each manuscript submitted to CJSLPA for peer-review that is based on work conducted with humans or animals must acknowledge appropriate ethical approval. In instances where humans or animals have been used for research, a statement indicating that the research was approved by an institutional review board or other appropriate ethical evaluation body or agency must clearly appear along with the name and affiliation of the research ethics and the ethical approval number. The review process will not begin until this information is formally provided to the Editor.

Similar to research involving human participants, CJSLPA requires that work conducted with animals state that such work has met with ethical evaluation and approval. This includes identification of the name and affiliation of the research ethics evaluation body or agency and the ethical approval number. A statement that all research animals were used and cared for in an established and ethically approved manner is also required. The review process will not begin until this information is formally provided to the Editor.

Renseignements à l'intention des collaborateurs

La Revue canadienne d'orthophonie et d'audiologie (RCOA) est heureuse de se voir soumettre des manuscrits de recherche portant sur la communication humaine et sur les troubles qui s'y rapportent, dans leur sens large. Cela comprend les manuscrits portant sur les processus normaux et désordonnés de la parole, du langage et de l'audition. Nous recherchons des manuscrits qui n'ont jamais été publiés, en français ou en anglais. Les manuscrits peuvent être tutoriels, théoriques, synthétiques, pratiques, pédagogiques ou empiriques. Tous les manuscrits seront évalués en fonction de leur signification, de leur opportunité et de leur applicabilité aux intérêts de l'orthophonie et de l'audiologie comme professions, et aux sciences et aux troubles de la communication en tant que disciplines. Par conséquent, tous les manuscrits sont évalués en fonction de leur incidence possible sur l'amélioration de notre compréhension de la communication humaine et des troubles qui s'y rapportent. Peu importe la catégorie, tous les manuscrits présentés seront soumis à une révision par des collègues afin de déterminer s'ils peuvent être publiés dans la RCOA. La Revue a établi plusieurs catégories de manuscrits afin de permettre la meilleure diffusion possible de l'information portant sur la communication humaine et les troubles s'y rapportant. Les catégories de manuscrits comprennent :

Tutoriels : Rapports de synthèse, traités ou exposés de position portant sur un sujet particulier dans un cadre théorique ou clinique.

Articles : Manuscrits conventionnels traitant de recherche appliquée ou expérimentale de base sur les questions se rapportant à la parole, au langage ou à l'audition et faisant intervenir des participants humains ou animaux.

Comptes rendus cliniques : Comptes rendus de nouvelles procédures ou méthodes ou de nouveaux protocoles cliniques portant particulièrement sur une application directe par rapport aux questions d'identification, d'évaluation et de traitement relativement à la parole, au langage et à l'audition.

Comptes rendus sommaires : Semblables aux notes de recherche, brèves communications portant sur des conclusions préliminaires, soit cliniques soit expérimentales (appliquées ou fondamentales), pouvant mener à une étude plus poussée dans l'avenir. Ces comptes rendus se fondent typiquement sur des études à petit « n » ou pilotes et doivent traiter de populations désordonnées.

Notes de recherche : Brèves communications traitant spécifiquement de travaux expérimentaux menés en laboratoire. Ces comptes rendus portent typiquement sur des questions de méthodologie ou des modifications apportées à des outils existants utilisés auprès de populations normales ou désordonnées.

Comptes rendus d'expérience : Comptes rendus décrivant sommairement la prestation de services offerts en situations uniques, atypiques ou particulières; les manuscrits de cette catégorie peuvent comprendre des comptes rendus de dépistage, d'évaluation ou de traitement.

Courrier des lecteurs : Forum de présentation de divergences de vues scientifiques ou cliniques concernant des ouvrages déjà publiés dans la Revue. Le courrier des lecteurs peut avoir un effet sur notre façon de penser par rapport aux facteurs de conception, aux confusions méthodologiques, à l'analyse ou l'interprétation des données, etc. Comme c'est le cas pour d'autres catégories de présentation, ce forum de communi-cation est soumis à une révision par des collègues. Cependant, contrairement aux autres catégories, on recherchera la réaction des auteurs sur acceptation d'une lettre.

Présentation de manuscrits

Pour soumettre un article, les auteurs doivent utiliser le système de soumission électronique de l'ACOA à l'adresse **http://powerreview3.aptaracorp.com/journals/sac-oac/**. Si vous ne pouvez pas utiliser le système électronique, veuillez envoyer par courriel un fichier Word contenant le manuscrit, y compris tous les tableaux, les figures ou illustrations et la bibliographie. Adressez le courriel au rédacteur en chef à l'adresse **elizabeth.fitzpatrick@uottawa.ca**.

On doit joindre aux exemplaires du manuscrit une lettre d'envoi qui indiquera que le manuscrit est présenté en vue de sa publication. La lettre d'envoi doit préciser que le manuscrit est une œuvre originale, qu'il n'a pas déjà été publié et qu'il ne fait pas actuellement l'objet d'un autre examen en vue d'être publié. Les manuscrits sont reçus et examinés sur acceptation de ces conditions. L'auteur (les auteurs) doit (doivent) aussi fournir une attestation en bonne et due forme que toute recherche impliquant des êtres humains ou des animaux a fait l'objet de l'agrément d'un comité de révision déontologique. L'absence d'un tel agrément retardera le processus de révision. Enfin, la lettre d'envoi doit également préciser la catégorie de la présentation (i.e. tutoriel, rapport clinique, etc.). Si l'équipe d'examen juge que le manuscrit devrait passer sous une autre catégorie, l'auteur-contact en sera avisé.

Toutes les présentations doivent se conformer aux lignes de conduite présentées dans le publication Manual of the American Psychological Association (APA), 6e Édition. Un accusé de réception de chaque manuscrit sera envoyé à l'auteur-contact avant la distribution des exemplaires en vue de la révision. La RCOA cherche à effectuer cette révision et à informer les auteurs des résultats de cette révision dans les 90 jours de la réception. Lorsqu'on juge que le manuscrit convient à la RCOA, on donnera 30 jours aux auteurs pour effectuer les changements nécessaires avant l'examen secondaire.

L'auteur est responsable de toutes les affirmations formulées dans son manuscrit, y compris toutes les modifications effectuées par les rédacteurs et réviseurs. Sur acceptation définitive du manuscrit et immédiatement avant sa publication, on donnera l'occasion à l'auteur-contact de revoir les épreuves et il devra signifier la vérification du contenu dans les 72 heures suivant réception de ces épreuves.

Organisation du manuscrit

Tous les textes doivent être écrits à double interligne, en caractère standard (police de caractères 12 points, non comprimée) et sur papier 8 ½" X 11" de qualité. Toutes les marges doivent être d'au moins un (1) pouce. Un fichier électonique du manuscrit doit être présenté directement au rédacteur en chef. L'identification de l'auteur est facultative pour le processus d'examen : si l'auteur souhaite ne pas être identifié à ce stade, il devra préparer un fichier électronique dont la page couverture et leas remerciements seront voilés. Seuls les auteurs sont responsables de retirer toute information identificatrice éventuelle. Tous les manuscrits doivent être rédigés en conformité aux lignes de conduite les plus récentes de l'APA. Ce manuel est disponible dans la plupart des librairies universitaires et commerciaux. En général, les sections qui suivent doivent être présentées dans l'ordre chronologique précisé.

Page titre : Cette page doit contenir le titre complet du manuscrit, les noms complets des auteurs, y compris les diplômes et affiliations, l'adresse complète de l'auteur-contact et l'adresse de courriel de l'auteur contact.

Abrégé : Sur une page distincte, produire un abrégé bref mais informateur ne dépassant pas une page. L'abrégé doit indiquer l'objet du travail ainsi que toute information pertinente portant sur la catégorie du manuscrit.

Mots clés : Immédiatement suivant l'abrégé et sur la même page, les auteurs doivent présenter une liste de mots clés aux fins de constitution d'un index.

Tableaux : Tous les tableaux compris dans un même manuscrit doivent être écrits à double interligne sur une page distincte. Les tableaux doivent être numérotés consécutivement, en commençant par le Tableau 1. Chaque tableau doit être accompagné d'une légende et doit servir à compléter les renseignements fournis dans le texte du manuscrit plutôt qu'à reprendre l'information contenue dans le texte ou dans les tableaux.

Illustrations : Toutes les illustrations faisant partie du manuscrit doivent être annexer avec chaque exemplaire du manuscrit. Chaque manuscrit doit être accompagné d'un fichier électronique pour chaque image et graphique en format JPEG, TIFF, AI, PSD, GIF, EPS ou PDF, compression minimale 300 ppp. Pour les autres types d'illustrations informatisées, il est recommandé de consulter le personnel de production de la RCOA avant la préparation et la présentation du manuscrit et des figures et illustrations s'y rattachant.

Légendes des illustrations : Les légendes accompagnant chaque figure et illustration doivent être écrits à double interligne sur une page distincte et identifiées à l'aide d'un numéro qui correspond à la séquence de parution des figures et illustrations dans le manuscrit.

Numérotation des pages et titre courant : Chaque page du manuscrit doit être numérotée, y compris les tableaux, figures, illustrations, références et, le cas échéant, les annexes. Un bref (30 caractères ou moins) titre courant descriptif doit apparaître dans la marge supérieure droite de chaque page du manuscrit.

Remerciements : Les remerciements doivent être écrits à double interligne sur une page distincte. L'auteur doit reconnaître toute forme de parrainage, don, bourse ou d'aide technique, ainsi que tout collègue professionnel qui ont contribué à l'ouvrage mais qui n'est pas cité à titre d'auteur.

Références : Les références sont énumérées les unes après les autres, en ordre alphabétique, suivi de l'ordre chronologique sous le nom de chaque auteur. Les auteurs doivent consulter le manuel de l'APA le plus récent pour obtenir la façon exacte de rédiger une citation. Les noms de revues scientifiques et autres doivent être rédigés au long et imprimés en italiques. Tous les ouvrages, outils d'essais et d'évaluation ainsi que les normes (ANSI et ISO) doivent figurer dans la liste de références. Les références doivent être écrits à double interligne.

Conflits d'intérêts possibles et engagement double

Dans le processus de présentation, les auteurs doivent déclarer clairement l'existence de tout conflit d'intérêts possibles ou engagement double relativement au manuscrit et de ses auteurs. Cette déclaration est nécessaire afin d'informer la RCOA que l'auteur ou les auteurs peuvent tirer avantage de la publication du manuscrit. Ces avantages pour les auteurs, directs ou indirects, peuvent être de nature financière ou non financière. La déclaration de conflit d'intérêts possibles ou d'engagement double peut être transmise à des conseillers en matière de publication lorsqu'on estime qu'un tel conflit d'intérêts ou engagement double aurait pu influencer l'information fournie dans la présentation ou compromettre la conception, la conduite, la collecte ou l'analyse des données, ou l'interprétation des données recueillies et présentées dans le manuscrit soumis à l'examen. Si le manuscrit est accepté en vue de sa publication, la rédaction se réserve le droit de reconnaître l'existence possible d'un tel conflit d'intérêts ou engagement double.

Participants à la recherche – êtres humains et animaux

Chaque manuscrit présenté à la RCOA en vue d'un examen par des pairs et qui se fonde sur une recherche effectuée avec la participation d'être humains ou d'animaux doit faire état d'un agrément déontologique approprié. Dans les cas où des êtres humains ou des animaux ont servi à des fins de recherche, on doit joindre une attestation indiquant que la recherche a été approuvée par un comité d'examen reconnu ou par tout autre organisme d'évaluation déontologique, comportant le nom et l'affiliation de l'éthique de recherche ainsi que le numéro de l'approbation. Le processus d'examen ne sera pas amorcé avant que cette information ne soit formellement fournie au rédacteur en chef.

Tout comme pour la recherche effectuée avec la participation d'êtres humains, la RCOA exige que toute recherche effectuée avec des animaux soit accompagnée d'une attestation à l'effet que cette recherche a été évaluée et approuvée par les autorités déontologiques compétentes. Cela comporte le nom et l'affiliation de l'organisme d'évaluation de l'éthique en recherche ainsi que le numéro de l'approbation correspondante. On exige également une attestation à l'effet que tous les animaux de recherche ont été utilisés et soignés d'une manière reconnue et éthique. Le processus d'examen ne sera pas amorcé avant que cette information ne soit formellement fournie au rédacteur en chef.

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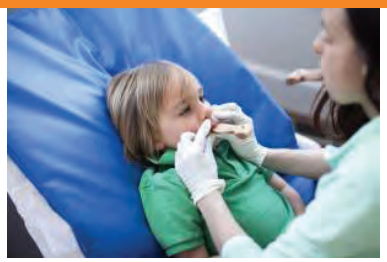

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Module 2 : Oral functions and their rehabilitation (4 days)

Assimilate the neurology concepts inherent to the sensori-motor development (neuro-evolutive stages) that are complementary to the 4 oral neuro-vegetative functions : breathing, sucking, chewing and swallowing. Master the motor oral exercises of the 4 functions.

Module 3 : Malocclusion, articulation disorders (4 days)

Part 1 : occlusion (2 days) Assimilate the theoretical concepts on malocclusions and articulation disorders resulting from immature or inadequate sensori-motor development or neuro-vegetative functions. Master the exercises specific to these conditions.

Part 2: articulation and speech disorders (2 days : mandatory for speech therapists and elective for other professionals). Assimilate the concepts inherent to the production of human articulated speech as well as sounds and voice production processes that go along with a harmonious development of primitive neurological circuit. Master the exercises specific to associated pathologies.

Module 4 : The 12 senses according to Steiner and associated neurology (4 days)

Acquire a synoptic and coherent vision of neurofunctional reorganisation and delve deeper into the teachings of Rudolf Steiner on the relations between Walking-Talking-Thinking and the 12 senses.

Module 5 : In-depth study of neurological and neurodevelopmental disorders (4 days)

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