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**[Aboriginal Early Childhood
Development Assessment: Issues
and Insights in a Cultural Context]**

A Report to the British Columbia Aboriginal Child Care Society

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***Aboriginal Early Childhood Development (AECD) Assessment:
Issues and Insights in a Cultural Context
A Report to the BC Aboriginal Child Care Society***

I BACKGROUND & INTRODUCTION

Over the past several years, Early Childhood Educators (ECEs) and professionals working in other areas of early childhood development (ECD) have been required to undertake child development screening and assessment. Typically, these assessments are used to identify developmental challenges children experience in early learning environments. Aboriginal ECEs have expressed concerns and raised questions about the cultural appropriateness of these tools when assessing the development of the First Nations/Aboriginal children in their programs. To begin to address some of these concerns the Public Health Agency of Canada (PHAC) contracted with the BC Aboriginal Child Care Society (BCACCS) to develop training to assist First Nations/Aboriginal ECEs to increase both knowledge and skill in the area of child development screening and assessment. BCACCS invited the Vancouver Island University (VIU) BC Regional Innovation Chair (BCRIC) for Aboriginal Early Childhood Development (AECD) to partner with them for the purpose of examining the research and other literature related to the use and effectiveness of these assessment tools and procedures. The goal of this work is to develop a greater understanding about the uses, approaches, processes, and efficacy of child development screening and assessment. In particular, BCACCS wants to understand more fully the issues related to the use of these tools with First Nations/Aboriginal children. As a result, BCACCS approached the National Collaborating Centre for Aboriginal Health (NCCA) to request funding (and was approved) to undertake this literature scan.

For this paper, research and professional publications related to child development screening and assessment have been reviewed. Literature has been selected and summarized that examine: 1) some of the types of screening and assessment tools widely used; 2) the purpose and effectiveness of the tools and assessment processes as described by specialists in the area of screening and assessment; and 3) issues and insights related to the screening and assessment processes generally as well those with an emphasis on the importance of cultural contexts of assessment. It should be noted that the literature reviewed for the purpose of this report do not represent an exhaustive list of researchers or their work. Rather the report provides an overview of articles identified in the search and key issues and insights related to screening and assessment tools.

Across the documents reviewed for the purpose of this report, the differences between screening and assessment were not always clearly noted. Where definitions were provided, *screening* was described as the process of determining whether a child was meeting a broad range of developmental milestones typically expected. *Assessment* was generally explained as a more formal and often standardized process intended to determine specific developmental challenges experienced by a child. The purpose of both these processes is to develop a clearer understanding of a particular child's development and which specific areas of development might need to be supported (Goelman et al., 2011; Slentz, Early & McKenna, 2008).

The information collected has been synthesized into broad themes in section 3 and recommendations are made for further research and actions related to the development and use of

screening and assessment processes and tools for use in First Nation/Aboriginal communities. Most of the articles used for the purpose of this review come from various journals and databases. To keep the information current and relevant, most articles examined will be no more than ten years old. Any older documents have been chosen because information seemed key to the discussion and supports information in later reviews. In each of the sections, *I. Early Childhood Development Screening and Assessment* and *II. Early Childhood Development Screening and Assessment in a Cultural Context*, the papers reviewed are in chronological order. In this way, it is possible to see the ways in which considerations related to assessment have developed over time.

It should be noted that the terms “Aboriginal” and “Indigenous” are used interchangeably throughout this document. In Canada both terms are inclusive, referring to First Nations, Métis and Inuit people. However, when referencing documents originating in international jurisdictions, the terminology used will reflect that used by the author of that document referenced.

II. EARLY CHILDHOOD DEVELOPMENT SCREENING AND ASSESSMENT

In 1998, Cathy Nutbrown wrote an article called *Early Assessment – Examining the Baseline* (1998). While this article (originating in the United Kingdom) is outside the ten year maximum, the emphasis on the Baseline Assessment and the reasons for it resonated with this review of the literature. Although the Baseline Assessment was government legislated as a means to understand where children were at developmentally (specifically in areas related to knowledge and skill at the time of entrance to formal schooling) and reportedly to identify funding priorities, Nutbrown raises some important questions and considerations when exploring the value and utility of early years assessments more generally. When discussing the ‘fitness’ of an assessment tool, Nutbrown states,

Criteria for ‘fitness’ may vary with purpose but some criteria for selection are needed and where young children’s learning is concerned questions of authenticity can be asked before instruments are selected. These include, “Does the instrument reflect understanding about children’s early learning and development? Does the instrument embrace key concepts in children’s learning? Does the instrument use meaningful contexts to assess children’s learning? Does the instrument demonstrate respect for learning? Does the instrument offer an opportunity to find out what children love in their learning? [and] Does the instrument identify what children’s learning looks like? (p. 53)

While Nutbrown (1998) stresses that assessments are helpful to identify children’s learning and to plan for areas of learning where support may be required, she also raises concerns about areas of learning that are missed in the assessment process. She emphasizes some potential weaknesses of assessment tools including:

- Lack of ability to assess more abstract learning such as motivation and interest in learning.
- Potential to undervalue learning that is not accounted for in the assessment tool.
- Risk of other important learning not included in the assessment process going unnoticed.

She explains the assessment should not be the “champion: of teaching; of learning; of management and of the early detection of children’s difficulties. No checklist, profile or test however carefully

constructed, can provide a complete picture of individual achievement in any area of learning” (p. 59).

To avoid the dangers of having one assessment rule teacher’s planning for children, Nutbrown advises using multiple forms of assessment including, “observation, reflection, discussion and a willingness to be open to children’s learning agendas” (p. 60). She explains the need for teachers to be free to teach in their own style and suggests that this would ensure students would get the most out of their learning experience and would receive better support from their teachers (p.60).

Over a six month period in 2005, Margaret MacDonald (2006) conducted a research project in New Westminster, British Columbia. The study was reported in, *Toward formative assessment: The use of pedagogical documentation in early elementary classrooms*. The study involved five kindergarten classrooms. The purpose of the study was to examine the effectiveness of pedagogical assessment. MacDonald outlined the challenges that teachers face in “introducing prescribed literacy activities in a way that sensitively meets young children’s learning needs” (p. 232) and discussed different approaches to supporting children’s literacy development. She described how pedagogical documentation can assist a teacher in observation and assessment of children’s learning and how using this method will “deepen the interpretation of the observations, and move away from a focus on summative evaluation where observation and testing are used to determine if a child has mastered a requisite skill...” (p. 233). Pedagogical narration is defined as “...both content and process involving the use of concrete artifacts in the form of audio recordings, photographs, examples of the children’s work, and collaborative re-visitation, interpretation and negotiation by the *protagonists* (children, teachers, and parents) to promote dialogue and reflection.” (p. 233).

MacDonald’s study was to answer two questions. The first, was to determine to what extent pedagogical documentation could assist family members to better understand their child’s learning. The second, was to determine if teachers found pedagogical documentation useful as a method of assessment as well as to guide planning. None of the five teachers selected for the study had experience with pedagogical documentation. Teachers were chosen based on her/his supervisor’s perception of willingness to collaborate and to undertake innovative teaching activities. The teachers were supported by the researcher throughout the six month project to: 1) document children’s literacy activities; 2) engage children and parents/families to collaborate and comment “on the children’s learning and intentions and by asking open-ended questions”; and 3) to reflect on the learning of individual children based on the documented observations. Teachers’ experiences were shared through emailing and face to face interviews. Five parents were selected from each classroom to also participate in the study (25 parents in total).

Study results were reported as follows. All of the parents indicated that they found the pedagogical documentations helpful to understanding what children were doing in the classroom and how what they were doing supported learning related to reading and writing. They also stated that the documentation was helpful to initiate discussions with their children; “The children were able to point out what was happening in the pictures and the text of the documentation album explained the learning processes” (p. 238). The teachers agreed that pedagogical documentation “helped them focus on student learning, and outcomes in general

[and]... helped them develop an overall awareness of the children's learning..." (p. 238). They believed that this method of assessment helped them to become more reflective teachers and as a result of this, the children became more reflective in their writing.

Teachers emphasized the importance of the process to the parents as well. They suggested that "it gave a visual description to a progression that is often bewildering to parents... [showing] where children are in their learning and what might follow" (p. 239).

There were challenges for teachers as well. They expressed concern that the process was time consuming and that their other duties and lack of support in the classroom made it difficult to document children's learning and to engage both children and parents in the process. MacDonald (2006) commented in her summary that "The structure of our elementary classrooms which utilizes a single teacher for a large group of 20-25 children tends to focus more exclusively on the individual performance and outcomes of students, and less on formative assessment, and the collaborative process of teaching and learning" (p. 240). She goes on to make some recommendations to enhance the opportunity for pursuing pedagogical documentation such as co-teaching and encouraging sharing learning with other teachers by visiting each other's classrooms, utilizing human resources in creative ways and finding ways to include older children to assist with documentation.

In *Provoking Dialogue: Promote a Deeper Understanding of Teaching and Learning through Images and Documents* (2010) MacDonald and a colleague Sánchez explore the effectiveness of pedagogical documentation. While this article is more focused on how pedagogical documentation can help post secondary students understand the strengths of this method of assessment, it makes some important points relevant to this review by underscoring the strengths of this assessment approach from the student perspective. MacDonald and Sánchez explained one of the objectives of the project (undertaken at a community college early childhood program and a university Faculty of Education program) was to, "inspire students toward a deeper understanding of young learners, contest narrow assumptions about children, and reframe pedagogical practices" (p. 25). The authors talked about how "images of young children as passive and deficient and ill equipped for school have limited the scope of early learning" (p. 25). This results in early childhood teachers and parents becoming preoccupied with trying to remedy the child's deficiencies in order to prepare them for the important learning ahead. The authors suggest that the early childhood program thus "remains a servant in design and structure to prepare children for what is considered the more meaningful experience that lies ahead" (p. 25).

Students are involved in a process of observing young children and recording events where children are actively engaged and are "demonstrating perseverant effort, enthusiasm, focus, joint attention, joy, curiosity or wonder in their encounters... with their peers and teachers" (Macdonald & Sanchez p. 26). Students are then asked to share and discuss their observations with other students. The observations are then analyzed and interpreted in the group. Rather than focusing on prescribed learning outcomes students are encouraged to "consider children(s) intent, current understanding, interests, inspiration, theories and ways of knowing or communicating..." (p. 26). This process challenges students to listen carefully to one another, to question, and to think deeply about their own observations as well as the thoughts of others. After this process was complete, students reflected on what they learned about children and childrens' learning. Students spoke about how the pedagogical documentations and the associated processes of talking with children and with each other offered an opportunity to understand

more fully who the child is, what his/her interests are and to “probe deeper into their thinking and reasoning” (p. 27). The students also reflected on how they saw that children brought previous learning with them and applied it to what they were doing in the early childhood classroom. One student suggested that pedagogical assessment “is a tool for opening up the minds of the people who need to see what children can do...[and] what they are capable of if you give them time, space and resources...” (p. 27). The student suggested that parents, teachers, and policy makers might require this information. While not being directly focused on the effectiveness of screening and assessment, MacDonald and Sánchez illuminated how more traditional forms of assessment can miss some of the most important learning that children experience.

Sharon Ringwalt (2008) in *Developmental Screening and Assessment Instruments with an Emphasis on Social and Emotional Development for Young Children Ages Birth through Five* compiled an overview of assessment instruments and information to guide individuals assessing young children. This guide was created for the National Early Childhood Technical Assistance Centre (NECTAC) to assist the US Office of Special Education Programs to identify appropriate instruments for assessing young children ages birth to five years. The NECTAC guide provides information on multiple developmental domains and tools that measure social and emotional development. The guide also categorizes assessment instruments by who should use the tool; that is, whether it is recommended to be used by parents and other caregivers or professionals. It is not clear who is included in the professional category as criteria to define these two groups are not provided.

Information about each instrument includes the following:

- description of the tool,
- age range applicable,
- time it takes to complete,
- scoring used to measure child development,
- applicable psychometric information, and
- qualification recommended for the assessor.

In the description, guidance is provided about the purpose of the tool, the areas of development assessed in the tool, ways to involve parents (as applicable), any linguistic/ language limitations, and training information that is available.

Slentz, Early and Mckenna (2008) in *A Guide to Assessment in Early Childhood: Infancy to Age Eight* provide a thorough summary of assessment and screening tools for early childhood (defined by the authors as birth to age eight). The publication includes an overview of: the purposes and methods of assessments (including diagnostic and program evaluation, and accountability assessments); screening tools; assessment tools to inform instruction and monitor children’s progress; diagnostic tools; program evaluation tools; and assessment tools by age ranges. In total, the document describes over one hundred specific tools used across the United States by title, by purpose by age,

and by description with reference to reliability and validity where that information was available. A table of 'Summary Characteristics' provides information intended to assist educators to choose assessment methods that are most likely to match with what the assessor wishes to know about a child or program.

Slentz, Early and Mckenna (2008) remind those using assessment tools about the importance of taking care when using them to assess school readiness. They suggest that assessments should be used for the purpose of determining whether children should delay entering kindergarten. They stress, "If the purpose of the assessment is to identify children who need additional supports or services, it makes most sense to choose a tool (or tools) designed for screening appropriate for kindergarten-aged children and covering a wide variety of domains" (p. 74). To underscore the importance of using assessment tools wisely when assessing very young children, the National Association for the Education of Young Children's' (2003) *Position Paper on Building an Effective, Accountable System in Programs for Children Birth Through Age 8 Early Childhood Curriculum, Assessment, and Program Evaluation* was included in the appendix. The position paper strongly states, "To assess young children's strengths, progress, and needs, use assessment methods that are developmentally appropriate, culturally and linguistically responsive, tied to children's daily activities, supported by professional development, inclusive of families, and connected to specific, beneficial purposes" (as cited in Slentz et al., 2008, p. 183).

While the assessment guide provides a thorough summary of assessment tools, Slentz, Early and Mckenna (2008) did not specify particular tools that reflect attention to culture and language. However, they did note a 'caveat' that suggests that challenging experiences with assessment are likely to be "magnified when young children from diverse language groups and cultural backgrounds are being assessed" (p. 17). The authors go on to suggest that the NAEYC recommendations reflect good practice for assessment overall and also emphasize that special care should be taken when assessing children from different cultures and ethnicities, and language groups. NAEYC "Indicators of Effectiveness" (p. 2) are highlighted below:

- *Ethical principles guide assessment practices.*
 - *Assessment instruments are used for their intended purposes.*
 - *Assessments are appropriate for ages and other characteristics of children being assessed.*
 - *Assessment instruments are in compliance with professional criteria for quality.*
 - *What is assessed is developmentally and educationally significant.*
 - *Assessment evidence is used to understand and improve learning.*
 - *Assessment evidence is gathered from realistic settings and situations that reflect children's actual performance.*
 - *Assessments use multiple sources of evidence gathered over time.*
 - *Screening is always linked to follow-up.*
-

- *Use of individually administered, norm-referenced tests is limited.*
- *Staff and families are knowledgeable about assessment (p. 3).*

Barbara Mongelli Hanes (2009) completed a dissertation on *Perceptions of Early Childhood Assessment Among Early Childhood Educators*. Hanes posed the following questions in a survey for her research:

- Do “early childhood educators find the assessment instruments used in their schools developmentally appropriate, purposeful, and inclusive?”
- Is it their belief that they have been sufficiently trained in the use of assessment tools? [and]
- Do they perceive the requirements for assessment at the early childhood level to be affecting their work with the students in their classrooms?” (p.110).

While many people who completed Hanes’ (2009) surveys were happy about using assessments within their programs there were a number of concerns raised in her survey. Hanes explained how, “Horton and Bowman’s (2002) national survey of early childhood experts indicated the strong belief that early childhood assessment should remain focused on information assessment techniques that do not put stress on children” (p. 113). Hanes went on to say that the data showed that schools should be focused more on informal assessments rather than formal.

Hanes (2009) suggests that teachers often feel pressure to improve the standardized test scores. She describes how, “... *kindergarteners in Alabama are subjected to standardized testing three times an academic year, causing administrators in the district to abandon nap time in order to provide kindergarten teachers with more instructional time to prepare children for tests*” (Kozol, 2006 as cited by Hanes, 2009, p. 36). She also refers to Stipek (2006), who suggests that when programs focus too much on the academics and achieving high scores on assessments, children lose out on developing non-academic skills. She described a survey by the United States Department of Education that indicated “75% of the teachers surveyed considered such non-academic factors as a child’s enthusiasm, curiosity, and physical well-being more important than their ability to count, recite their alphabet or solve problems” (p. 41).

Hanes (2009) also noted that many of the respondents agreed ongoing training or further training in the area of assessments was important. Many of the respondents in Hanes’ survey had little or no training in early childhood education. She pointed out that lack of training could have an impact on the knowledge and understanding about early childhood assessments and that this lack of knowledge could have an impact on the data reported.

Based on her findings, Hanes (2009) proposes that the best time to do an assessment is when the children are engaged in play activities and while occupied in creative pursuits. Doing assessments in this way ensures that the process itself is less visible, therefore children are less likely to connect the activity with assessment. Hanes emphasizes the assessment will be more valuable if done with attention to the needs and interests of the child such as letting children talk, listening to them, and allowing educators to probe the child’s responses with questions.

The *Developmental Screening “Preferred Tool List” for Children Birth to Three years*, by Kimberly Aakre, Kim Paul and Sara Barry was submitted to the Agency of Human Services Office of Vermont Health Access in 2010. This overview of twenty-five preferred tools provides guidance to physicians with regard to instruments that are known to work well assessing the development of infants and toddlers.

Aakre, Paul and Barry (2010) developed criteria to guide the use of assessment tools on the following:

- instrument purpose – presence of developmental delays and risks,
- inclusion of broad areas of developmental domains specific to “motor, language, cognitive and social-emotional development” (p. 3),
- validity - accuracy,
- sensitivity – numbers of children who are correctly identified with delays,
- specificity - numbers of children who are correctly identified as not having developmental delays,
- practicality – the degree to which the administration of the instrument is “done with relative ease” (p. 4),
- ease of use – is sensitive to family and culture, and
- cost and access of the tool.

Goelman, Ford, Pighini, Dahinten, Harris, Synnes, Tse, Ball, and Hayes (2010) collaborated on a paper, *What We Learned about Early Identification and Screening*. The authors provide definitions of assessment, screening and early identification, and explore the objectives of these processes. They also provide information regarding developmental screening and assessment tools used in British Columbia (BC) such as: *universal* processes including Apgar testing at birth; newborn hearing; general screening at one year; and vision screening at Kindergarten. Other *selective* screening processes used in BC include at-risk infants, some vision screening of preschoolers, as well as screening that may be requested by physicians or by parents/families and/or other professionals.

Goelman, Ford, Pighini, Dahinten, Harris, Synnes, Tse, Ball, and Hayes (2010) discuss the benefits and challenges of conducting a review of these four studies and raise many important points related to the strengths and challenges of screening and assessment processes. The authors suggest that these processes have been sanctioned as an important way to “1) identify populations that are at risk, and to obtain important ecological and epidemiological data on their circumstances; and 2) to evaluate the success of public health interventions by tracking their effectiveness” (Council on Children with Disabilities, 2006 as quoted in Goelman et al., 2010, p. 97). As well, the authors note a key strength of assessment is to “provide insights into a child’s developmental strengths and limitations and ... identify children who may be at risk for development challenges and who may need extra support” (p. 96). They also referred to principles developed by Miesel and Atkins-Burnett to guide screening and assessment. These include:

- Parents, family, and professional practitioners should be involved in the assessment process.
- Parents/family should be able to provide input and feedback to the information collected on their child.
- There should be a variety of sources of information used for the assessment.
- The process should identify child strengths and areas for growth and development.
- There should be a climate created within which the assessment will happen that is supportive, safe and avoids judgment (Goelman et al., 2010).

Goelman et al. (2010) also provide a summary of four specific approaches — “The Developmental Pathways Study”, the “Infant Neuromotor Study”, the “Community-based Screening Study”, and the “Indigenous Child Project” — and review the studies with reference to four questions:

- What do we want to know?
- Why do we want to know this?
- How will we gather information? and
- What will we do with the information? (p. 103).

Research undertaken in the “Indigenous Child Project” suggested that there were a number of areas about which parents expressed concern that were not attended to in their previous experience with assessment and which they believed would improve the process. These included:

- Asking parents to provide consent for assessments to be done.
- Including parents in the assessment process so they can give input.
- Ensuring assessment outcomes are shared with parents.
- Using tools and procedures that are culturally appropriate and sensitive so that “...they acknowledge [and] respect local knowledge, history, custom, and language” (p. 106).
- Involving all aspects of the child’s life including family, community and elders.

Goelman et al. (2010) also consider reconceptualist¹ approaches to child assessment such as the *Te Whariki* (1996) curriculum that was developed for educators in New Zealand working with Indigenous children. The *Te Whariki* (1996) provides diverse ways of looking at child development such as: creating portfolios that provide evidence of what a child is doing such as examples of their art, emerging writing, and storytelling. The assessments are not focused on deficiencies. The

¹ As quoted by McDonnell & Alphonse in Learning, Growing and Leading 2012 (2012) Pacini Ketchabaw and Pence state that, “...reconceptualist critiques have become a significant discourse that has fundamentally shifted ECEC practice, theory and research. The reconceptualist discourse questions assumptions of universality and the use, for example of terms such as ‘best’ and ‘appropriate’ that suggest singularity of response in a diverse and complex world” (p. 14).

authors underscore that reconceptualists believe that a “traditional hegemony has been used as a means to marginalize, control, and oppress specific populations of young children and their families “. (2010, p. 98)

III ABORIGINAL EARLY CHILDHOOD DEVELOPMENT SCREENING AND ASSESSMENT

In 2007, Jessica Ball undertook a study of early childhood professionals to determine their needs related to the use of screening and assessment tools. The full report was summarized in the booklet *Early Childhood Development Intercultural Partnerships Screening and Assessment Practices in Aboriginal Early Childhood Programs in British Columbia*. The project summary was used as the source of information for this review. The study included eighty-eight programs (about 70% of Aboriginal Early Childhood Development (AECD) programs across the province of BC). Ball found that the approaches to assessment used most frequently included the Ages and Stages Questionnaires (ASQ), observations, and talking with parents. Other tools used were the Nipissing Screen, the Work Sampling System, the Gesell Developmental Assessment, and the Battelle Developmental Inventory. Ball also reported a number of observations that the AECD professionals and staff made related to supportive strategies and barriers.

Supportive strategies identified by Ball (2007) included:

- involving parents both to gain consent and throughout screening, monitoring, and follow-up,
- ensuring that programs respect the parent’s level of readiness to proceed with formal screening and assessment,
- screening and assessment processes are undertaken in a comfortable and familiar environment such as home or child care,
- good communication between all involved – parents, AECD practitioners, other professionals throughout the assessment process,
- having the resources to follow up with specialists, therapist etc. as needed. Resources including funding for transportation, accommodation (if needed), child care (as required) and psychological support, and
- using “culturally appropriate practice [such as] respecting parents, listening to parents, working to build a positive relationships [sic] with parents, and only introducing formal observations, screening, or assessment when the parents are ready and signal agreement through explicit consent” (p. 4).

Barriers/challenges included:

- lack of specialized consultants for specific developmental challenges,
- difficulty with follow up particularly waitlists, issues with geographic location resulting in isolation, distance from services,

- lack of communication across all professionals including service providers and AECD practitioners, and
- knowledge about and access to resources and services (Ball, 2007).

Ball (2008) also lead research in a Public Health Agency of Canada funded project, *Culturally appropriate implementation of the Ages and Stages Questionnaire in Aboriginal Head Start Programs in BC: Findings and Recommendations*. This project was developed to investigate steps toward advancing the usefulness and relevance of the Ages and Stages Questionnaire (ASQ) in Aboriginal Head Start programs.

Ball (2008) states in her report that, “though doubts about the cultural suitability of the tool do not appear to be widespread, expressions of concern need to be investigated to inform decisions about investments in program-wide adoption of this tool” (p. 1). Practitioners participating in the study suggested the following ways of better ensuring culturally sensitive ASQ process:

- “building positive relationship with parents (or alternative caregivers),
- using the ASQ in a conversational respectful way to develop shared understandings about a child.
- making minor adaptations as needed as long as the conceptual intent of items is retained” (p. 13), and
- providing resources to train AECD professionals in ‘best practice’ related to screening and assessment.

As well, Ball (2008) summarized the benefits of using ASQ to a range of people including children, family, and AECD workers. A sample of these benefits included:

- providing a framework for conversation between early childhood professionals and family,
- encouraging meaningful observations of children,
- providing useful information about child development and an opportunity to notice what child can do,
- “encouraging positive parenting activities” (p. 19), and
- advancing understanding about screening, assessment, and planned intervention (2008).

Ball’s (2008) report also suggests action for future development of ASQ to create a stronger cultural context. Some of the ideas were to explore relationships with The University of Oregon ASQ team and the Kahnawake Mohawk Child and Family Centre in Quebec. The University of Oregon indicated that there had not been feedback at that time about concerns related to cultural appropriateness but that they were willing to engage in collaborative work to examine is more closely. The goal of the Kahnawake agency at that time was to, “gather ASQ data from children in the Kahnawake Mohawk community at each age level assessed by the sequence of ASQ forms, and to establish development

norms specifically for this population” (p. 21). Eventually they envisioned that by working with other communities across the country it might be possible to develop a, “kind of Pan-Aboriginal ASQ for use in programs serving Aboriginal children throughout Canada” (p. 21).

In 2009, Anula Nikapota undertook a review of *Cultural Issues in Child Assessment*. In her review she discusses child assessment within a cross-cultural context. She defined culture for the purpose of her discussion as, “the ideas, attitudes, beliefs and values that are shared by groups” (p. 200). Nikapota suggests that culture is dynamic and its effect on child behavior is influenced by a number of external circumstances and conditions including socio economic status, geography, parental education, media, and school experiences among others. For example, she explains that although poverty is not a direct result of culture, it can influence a child’s experience within a cultural group and is associated with a number of issues that put children at risk such as effects on health, education, and behaviour. She goes on to state that “assessment [must] consider the child’s physical health status, developmental stage and assessment of cognitive ability, as well as behavioral characteristics” (p. 201) and emphasizes the importance of using multiple sources of information to develop a full and accurate understanding of the child.

Nikapota (2009) stresses that the cultural perspectives of the family and community with whom and within which the child lives is essential to understanding information collected in the assessment process. She provides some examples of how culture influences the way families may perceive behaviours such as:

- different attitudes about parenting and child-rearing such as sleeping arrangements, dependence and independence, and autonomy,
- different ideas about intelligence and language development,
- different ideas about appropriate roles of family members and concepts such as duty and obligation,
- different concepts of the relationship between parent and child and how that relationship changes as children grow and develop, and
- different attitudes about the importance of a child’s relationship with his/her peers (Nikapota 2009).

Nikapota (2009) notes that standardized assessments have been shown to “increase reliability and minimize bias” (p. 203) and several standardized assessment tools that are known to maintain their reliability across cultures. She also suggests that using standard assessments cross-culturally is known to be cost effective. However, she acknowledges that, “...using indices of measurement of behaviour or disorder developed for one cultural context in another may perpetuate the existence of a category fallacy” (p. 203). That is, a particular behavior may be incorrectly interpreted if trying to understand it using an assessment tool developed based on another cultural context. Nikapota goes on to say that some standardized assessment tools have been successfully modified for use cross-culturally.

In addition to modifying existing tools to assess individuals from other cultural groups, Nikapota (2009) suggested combining standardized questionnaires with interviews. Interviews allow the clinician/

researcher to mediate the information gathered in the assessment process. For example, she explains how in some cultures expression is internalized and in some it is externalized. For example, behaviours that indicate emotional responses such as anger or vulnerability may be expressed differently in different cultural groups – some may repress expression of aggression while others may express it more openly. Nikapota reminds her reader that “measures and instruments in child assessment need to be appropriate not only for the culture of child and family but for culture of service” (p. 204). She concludes by saying, “a sensitive clinician-led interview including observation of a child...remains the most accurate means of behavioural assessment and the most likely to yield culture sensitive information” (p. 204).

While Nikapota’s (2009) review is focused on behavioural assessment, it seems likely that her findings can be applied to other areas of assessment. Additionally the literature she reviewed represents a wide range of cultural groups rather than being particular to Indigenous people. However, the benefits, challenges and strategies she suggests for improving assessment across cultural groups seems to support what other literature reviewed for this report has stated.

Preston, Cottrell, Pelletier and Pearce (2011) wrote *Aboriginal early childhood education in Canada: Issue of context*. Topics covered in this journal article include: the importance of good quality environments and programs for all children and Aboriginal children in particular; using conceptual approaches to Aboriginal research that are consistent with the needs, interests, values, and practices of those being researched; the need for Aboriginal pedagogy incorporated in Aboriginal early childhood development (ECD) programs including the culture and language endemic to the community in which the program is offered; and examples of successful Aboriginal ECD programs such as Aboriginal Head Start and the First Nation Partnership programs.

While the focus of Preston et al.’s article is on Aboriginal education, they do stress the relevance of their findings to screening and assessment of Aboriginal children.

Aboriginal pedagogy pertaining to the assessment and evaluation of learning also differs from mainstream practices...Aboriginal forms of assessment are dependent upon dimensions of reflection and self-growth, which are extremely personal processes manifested within the spiritual, emotional, intellectual and physical realms of increasing loyalty to teachers, promoting group cohesiveness and establishing a continued enthusiasm for learning” (p. 9).

Additionally, the authors stress that the relevance and appropriateness of AECD programs can be reinforced through the involvement of family, Elders and other respected community members in all aspects of the design, development and implementation of programs and related activities.

Preston et al. (2011) emphasize the importance of both parent and community involvement in children's education and further state that research has shown that parent involvement has many positive effects on children's school achievement. The authors caution us though that there must be special consideration when planning to involve Aboriginal parents as a result of different contextual and contemporary circumstances. They state:

Aboriginal parents/caregivers are often young or may be assuming parenting responsibilities as a grandparent. The Aboriginal family often encompasses input of parents, caregivers, Elders,

grandparents, aunt, uncles, cousins and/or community members. In turn, education leaders need to develop school-home strategies that are in line with the dynamics of Aboriginal families and their extended members (p. 10).

The article describes many important aspects of good quality early childhood education experiences for young children. While it only briefly addresses the topic of screening and assessment, it does stress a number of themes relevant to assessment including the importance of: culturally sensitive content and teaching methods; Aboriginal language and culture; involvement of parents, other family members, Elders and other community members in the design, development and delivery of Aboriginal programs and activities; and utilizing a theoretical model based on Aboriginal culture, tradition, values and ways of knowing to guide professional practice.

The Public Health Agency of Canada (2010) developed a guidebook, *Evaluating the Aboriginal Head Start in Urban and Northern Communities (AHSUNC) Program: Guidebook for the Brigance Head Start Screen Evaluation*. The Guidebook provides information to support the implementation of the Brigance screening program, used in a number of jurisdictions in BC and across Canada. It also provides suggestions for preparing to undertake the assessment including: steps to implementation; advice for administering the screening tool; and suggested adaptations for Aboriginal programs. For example, the Brigance Guide suggests that knowing more about the family, culture, and tradition would be beneficial to engaging parents in discussion about the tool. Advice for teachers using the tool to assess young children is also provided, suggesting ways to respond in particular situations such as a child who is crying, shy or talkative. The Guide also cautions that “if children become very upset, disruptive to the setting and are unable to be calmed” (p. 10), the assessment needs to be stopped. It emphasizes the importance of gaining consent from parents and keeping them informed about the results of the assessment and provides suggestions for how to create processes that help to build trust and openness, as well as advice about how to explain the results to family. Other resources are also part of the Guide such as a scripted presentation for teachers to use with parents, information sheets, and parent consent forms.

Being Maori: culturally relevant assessment in early childhood education (2011) by Lesley Kay Rameka explores the *Te Whāriki*. *Te Whāriki* is a policy statement developed by the Ministry of Education in collaboration with the Māori people and early childhood educators and teachers in New Zealand. The document is intended to support the integration of Māori worldviews into the educational curriculum system. The *Te Whāriki* has led to the development of assessment tools that are more reflective of, and sensitive to, Māori beliefs and values related to child development.

In the article, Rameka (2011) provides the following: background information about the *Te Whāriki*; an explanation of the importance of integrating understandings and values of the Māori people into both educational curriculum and assessments; and a description of the ways in which Māori worldviews influence children’s behaviours and actions and how those behaviours are perceived by families and community. As well, the author provides examples of how these views can be incorporated into developmental assessments. She suggests, “childhood assessment tools that are grounded in Māori understandings, world views, philosophies and practices can support the development of a secure Māori identity” (p. 247).

Rameka (2011) explains how in contemporary times Māori children are faced with increasingly complex roles. One role is being a Māori child with all the associated cultural beliefs, values and traditions of his/her family and community. The other role is to be part of and prepared for the modern world. Rameka states that this dual role “require[s] extra resilience in the development of strong identities, both personal and social...and [for children to] negotiate radically different cultural terrains, including assumptions, behaviours, values and beliefs about how the world is constituted and what each culture holds as truths” (p. 247). Some of the ‘ways of knowing’ that Rameka explicates include:

- Individuals are intrinsically connected to the spirit world.
- Individuals are connected to the past, present and future through their ancestors and their present and future family members.
- Individuals inherit both physical and spiritual attributes.
- A person’s “tapu” (p. 249) and “mana” (p. 249) are their most important characteristics – tapu provides the essence of the individual’s “potentiality for power” (p. 249) and manu provides the actual “prestige, power or reputation” (p. 249).
- Individuals possess “mauri...the spark of life...an essential and inseparable aspect of the child” (p. 249).
- Individuals must maintain “wairua...an unseen energy that impacts upon all aspects of a person’s being...” (p. 249). The individual must find balance of spirit to remain healthy.

Rameka (2011) suggests that “respect is fundamental to the concept of balance and understandings of Māori values, ideal, and ethics” (p. 250). For example, she explains how the concept of being a trickster is believed to be valuable in Māori culture because it is “viewed as key to acquiring knowledge and the achievement of the desired goals and outcomes” (p. 254). Possessing this quality allows the child to think at a deep level enabling creativity and ingenuity. Other characteristics such as respect, empathy, and connectedness to others are considered an integral part of the Māori person’s ‘way of being’.

Rameka (2011) concludes her discussion by reinforcing the importance of developing assessments that will support and develop Māori identity. An approach developed in collaboration with family and community has created an assessment framework that reflects personality characteristics valued by Māori society. These stories describe what the child is actually doing in relation to the characteristics described in the framework. Rameka explains how “the idealized personality structures evident in narratives presented highlighted valued behaviors, traits and characteristics that can be emulated and encouraged in early childhood services” (p. 254).

Exemplar Assessment for All Learners in Aotearoa New Zealand by Margrain and Clements (2007) explains that the exemplars “make visible learning that is valued so that the learning community can foster ongoing and diverse learning pathways” (as cited by Ministry of Education, 2004E, p. 39). The article goes on to explain the *Assessment for Learning* process. It is explained as “...

seeking and interpreting evidence for use by learners and their teachers, to identify where the learners are in their learning, where they need to go and how best to get there” (p. 40).

In the context of Te Whāriki, assessment is defined as “the process of obtaining, and interpreting, information that describes a child’s achievements and competence. The purpose of assessment is to provide pertinent information to contribute to improving learning opportunities for children” (New Zealand Ministry of Education, 1996. p. 99).

The Assessment for Learning process is believed to enhance student development in many ways such as: increasing student motivation; building skill in self assessment, individualizing learning, and supporting skill development as students participate actively in their learning and build relationships with others (Margrain & Clements, 2007). As well, teachers reported benefits to themselves as in the *Assessment for Learning* process finding their teaching to be more focused and more informed, enhancing both their teaching and learning. Using this assessment method also helped to build relationships with families and involve them in meaningful ways as they were encouraged to interact with their children regarding their assessment portfolios and provide their own responses to the narratives about the child’s experience. The Te Whāriki stresses the importance of an “emphasis on practices that support children as competent learners, a holistic view of learning, and acknowledgement of reciprocal relationship between children, adults including parents, and the learning environment” (Williamson, Cullen & Lepper, 2006 as quoted in Margrain and Clements, 2007, p. 42). Through resistance to standardized approaches the article explains that the New Zealand education system has found a learning approach and a strengths and skills-based assessment model that considers the child from a more holistic and inclusive perspective.

In *Redefining how success is measured in First Nations, Inuit and Métis Learning* (the Canadian Council on Learning (CCL) (2007) discusses the importance of finding alternative ways to envision and to measure Aboriginal learning. The CCL suggests that the effects of decades of marginalization, poverty and racism have resulted in barriers to success for Aboriginal learners. To address these barriers, the organization has proposed a new vision and new model they believe will help to re-define and promote success. Aboriginal people, as described in the document, hold a value for both life-long and holistic learning. Further, they suggest that the present system divides education into specific age-related categories (such as early learning, primary, secondary, and post-secondary etc.) which does not reflect holistic approaches to learning creating systemic barriers for Aboriginal people.

The CCL goes on to discuss the often stated concern about the need for comparable measures that show where Aboriginal learners are in relation to their non-Aboriginal counterparts. They reinforce that Aboriginal people suggest it is more important to compare communities of Aboriginal learners rather than comparing cross-culturally. The authors go on to state, “While it is important to collect data that facilitates comparable measures, focussing on this need can produce measures that conflict with Aboriginal interests in developing data around complex issues such as cultural values and identity” (p. 17).

The CCL notes a number of barriers that limit the relevance of research and assessment processes. These include:

- A focus on deficit rather than strength.
- The reality that life-long learning opportunities and resources are more limited for Aboriginal people than non-Aboriginal Canadians.
- A focus on the approaches used for secondary and higher education rather than life-long learning, “...from infancy through the life span...” (p. 31).
- A focus on cognitive development rather than taking an holistic approach.
- The fact that present approaches do not include the opportunity to measure experiential or traditional learning (p. 31).

In 2008, Stuart, Aitken, Gold, & Meade, (through Cognition Consulting) produced a report for the New Zealand Ministry of Education, *Evaluation of the Implementation of Kei Tua o Te Pae Assessment for Learning: Early Childhood Exemplars: Impact evaluation of the Kei Tua o te Pae 2006 Professional Development*. The report outlined findings of a study conducted to evaluate a professional development program designed to support *Assessment for Learning* processes for early childhood practitioners. The report focuses primarily on the ways in which the *Assessment of Learning* professional development program affected the knowledge and skills of the teachers and their effectiveness using this approach. The authors explain, “the Kei Tua o te Pae resource and associated professional development is particularly concerned with shifting assessment practices within a sociocultural frame to enhance children’s learning” (p. 33). To allow assessors to evaluate the capacity of the Assessment for Learning, evaluators identified eight key components of sociocultural practice, including that:

- Children are active in the assessment process.
- Learning is visible.
- Experiences are built on children’s prior knowledge.
- Learning dispositions are emphasized in the assessment.
- Family and whānau [extended family] are part of the process.
- Assessment practice is bicultural as needed.
- Pasifika assessment practice that is, that assessors are aware of the assessment practices identified for the children of the Pasifika region; and
- Collective assessment practices are used (pp. 33-34).

These elements provided the framework for interview questions. Information collected in the interview process was triangulated with centre and participant surveys and “coded general observations” (p. 34). These data were used to identify the extent to which the *Assessment for Learning* professional development activities supported the shift toward sociocultural assessment and identified barriers to meeting the expected outcomes. While there is not sufficient space in this literature review to summarize all the findings related to positive effects of the documented *Assessment for Learning* process, some examples of positive effects that seem closely linked to comments found in North American literature include:

- The *Assessment for Learning* approach engaged parents in the observation and assessment of their children and the change in practice provided more opportunities to talk with parents about what their children were doing.
- The approach improved professional practice, encouraged more discussion amongst staff about what they and the children were doing, and influenced the quality of assessment in positive ways.
- The approach helped bring the voices of both the children and parents to the assessment process.
- The approach provided greater opportunity to actively engage children in the assessment process.
- The approach provided opportunities to build on childrens' knowledge, skills and interests.
- There was more collaboration and shared responsibility among the staff in the assessment process.

Some of the challenges and barriers experienced with the documentation of the *Assessment for Learning* process (Stuart et al., 2008) included:

- Teachers expressed concern about the time it took to undertake the assessments.
- There was concern that many staff did not fully understand the some aspects of Assessment of Learning process.
- While there was evidence that there was a strong commitment to a bi-cultural approach in the curriculum, there continued to be limited evidence of children's learning related to this in the child's documentation.
- There were concerns expressed that while parents were interested and engaged in the process there still was not as much parent voice evidenced in the documentations as was expected.
- While the assessment process demonstrated a high level of interest and commitment in developing narratives about what the child was doing, there still was no strong evidence that the professionals were making connections to what that actually meant in terms of the child's learning.

In the report summary, Stuart et al., (2008) recommended that "consideration needs to be given to how documented assessment practices can become more formative and rigorous, and reveal the outcomes of this formateness without removing their affective appeal as celebratory artefacts" (p. 108).

Rita Bouvier (2010) authored *Aboriginal Education and Assessing Students' Ways of Knowing: Standardized tests vs multiple ways of knowing*. While this article is in many ways more relevant to the standardized approaches used for older children and young adults, the author makes several points

that are relevant to standardized testing and assessment instruments across the developmental continuum. Bouvier examines a number of issues related to standardized testing as well a number of issues relevant to assessment more generally. She discusses the impact assessments may have on learners who come from less affluent populations and/or different cultural backgrounds. For example, Bouvier points to evidence that there is a link between socio-economic status and how well a student does on an assessment. Students who come from more affluent families tend to score better. As well, she suggests that unless communities are involved in helping to develop assessment goals there is a risk they will not reflect the learner's cultural and community experience and thus be less helpful to informing the learning plan for the student. Bouvier also wonders how the information collected in the testing process will be used. For example, once these tests are administered, who decides the best course of action for the learner? That is, will it be understood within the context of the students "...social, cultural, economic and political realities?" (p. 106).

Bouvier (2010) stresses that assessors have to be careful about not perceiving cultural difference as failure. She states "This focus racializes our being and experience rather than viewing our aspirations to be who we are (placing value on our ways of knowing, being, valuing, and doing), and our social and economic needs as humans" (p. 106). She believes there needs to be a strengths-based way of assessing Aboriginal people and understanding that "...culture and language are the foundation to lifelong learning for all human societies and ... our continuance as peoples for generations to come" (p. 107).

Bouvier (2010) considers how different people have different perceptions about learning. She refers to the Canadian Council on Learning (CCL) and how the learning approaches articulated by the CCL in "Redefining Success in Aboriginal Learning" (2007) reinforces that Aboriginal people may understand learning differently. For example, among other characteristics, the CCL suggests Aboriginal people view learning as: holistic (attends to all aspects of the person's development); firmly grounded in a person's language and culture; a collective and spiritual activity; and a lifelong process. Bouvier (2010) suggests that these perceptions about learning may carry through to assessments. That is, if customs and traditions are ignored then assessments are less likely to be accurate. She goes on to emphasize that to promote equitable outcomes, Aboriginal people must define for themselves, "what is measured and how it will be measured" (p. 110).

Some primary themes most relevant to early childhood screening and assessment that were indicated in Bouvier article include the importance of:

- Cultural relevance in testing and assessment.
- Involving family and community in setting goals for the assessment process and conferring on 'what needs to be done' once the data is collected.
- Centering our screening assessment processes in community and cultural values.

In 2012, The Ministry of Children and Family Development (MCFD) of the BC government undertook a process of identifying screening and assessment instruments intended to assess the development of young children at risk. The report entitled, *Standards for Screening and Developmental Assessment*

Instruments – Literature Review, provided an overview of eleven articles that examined assessment tools and professional practices related to the assessment process. The report stated,

The availability of sound technical data is consistently identified as critical to this process with minimum reliability, validity, sensitivity and specificity scores of .65 to .70. Further norm referenced tests need to be normed against a sufficiently large and diverse sample size that reflects the social environment of the children being tested. Additional frequently mentioned considerations regarding selection of a tool are the sensitivity to culture and language, the ease of administration, cost and availability of the instrument and training (p. 2).

Each of the papers the ministry reviewed was summarized and (where applicable) approved tools were noted. As well additional information helpful to the practical application of the screening and assessment instruments was outlined. Some of the recommended strategies referred to the:

- Validity and reliability and psychometric properties of the instrument.
- Need for a good fit between the tool and the purpose of the assessment.
- Need for a good fit between the tool and the knowledge and skill of the user.
- Cultural sensitivity of the tool.
- Cultural competence of the assessor.
- Linguistic relevance of the tool.
- Age appropriateness of the assessment instrument.
- Importance of a large and diverse sample that reflects the population being assessed.
- Importance of a knowledgeable and skilled person administering the tool.
- Involvement of families in the assessment process.
- Tools are inclusive of multiple developmental domains.
- Need for multiple sources to be used for assessment processes.
- Need for comfortable and familiar settings for assessments.
- Need for the assessment to be part of an ongoing process.

Sam (2011) in her article, *An Indigenous Knowledge Perspective on Valid Meaning Making: A Commentary on Research with the EDI and Aboriginal communities*, explores research and assessment methods and analysis relevant to understanding Aboriginal child development. Sam examines how research such as the Early Development Index (EDI) that assesses child vulnerabilities across regions must consider both the issues and implications of the cultural context of children's lives. She prefaces her discussion with five questions to guide deliberations about the validity of research gathered on Aboriginal children. The questions are:

1. How do Indigenous epistemologies and knowledges inform and influence research processes that utilize the EDI as a measurement tool?
2. How can the EDI be used as a measurement tool within a research process that fosters the thriving of children and their families in Aboriginal communities while promoting Indigenous Peoples' self determination?
3. In what ways do local, Indigenous cultural and ethical considerations inform aspects of validation research aspects [sic] pertaining to the EDI?
4. How can (Western mainstream) universities build research capacity that is informed by Indigenous knowledges and ways of being, doing and knowing?
5. What are the potential consequences of using normative research tools- such as the EDI- as a method to build knowledge on children's development with Indigenous Peoples and Aboriginal communities?" (p. 316)

These questions are answered throughout Sam's (2011) document. Her comments seem to reflect many of the questions raised by other authors. She speaks in depth to the cultural relevance (or lack of) related to: research approaches, methodologies used, and the ways in which data is analyzed. She suggests that often these methods do not reflect the cultural experiences and history of the children who are assessed – in particular Aboriginal children. Sam suggests ways to ensure that research and assessment lessens the risk of harm to children and explains how assessment approaches could become more relevant and lead to a better understanding of Indigenous child development in an Indigenous context. She states, "...a comprehensive program of validation research can be informed and expanded by local, contextualized Indigenous perspectives and knowledges, and would thus become more responsive and useful to Indigenous Peoples within their respective communities" (p. 316). Sam raises concerns that perceiving/labeling Indigenous children as vulnerable further entrenches ideas of inferiority. She believes using research processes and data collection (such as the EDI) as a means to dialogue with Indigenous families and communities will build relationships in important ways. As well, discussing findings with families will provide them with the opportunity to contribute to our understanding about their child's development within their cultural and community context. She stresses that, "if our language and our research...foster dialogue and relationship building, and engage local communities in a process that enhances self-determination, we can contribute to transformative knowledge building that supports our children and their families to thrive" (p. 318).

Sam (2011) raises issues of language explaining that Indigenous children are often considered by their teachers to be English speakers. This results in teachers' misunderstanding the importance of language to culture and to the child's self identity. She wants teachers to be more knowledgeable about Indigenous languages and in this way not deny children's "inherent rights to their heritage, knowledges and languages" (p. 320).

In the article, Sam (2011) refers to Messick's (1998) suggestion that in determining validity, researchers need to consider the "social consequences" (p. 320) of research. Indigenous peoples use stories to convey information to one another, connecting them to "local places, customs, events, and people" (p. 320); therefore, Sam believes creating opportunity for oral stories is one way to create a familiar context and avoid negative consequences resulting from testing. She believes the tradition of oral stories is an important difference between Indigenous and mainstream cultures - that is, that mainstream society writes about knowledge while Indigenous cultures talk about their knowledge.

Sam (2010) urges researchers to think about the instruments and tools used for assessment as secondary sources of research and *localized knowledge and dialogue with family and community* as a primary data source. She also stresses that researchers need the involvement of Indigenous people in research processes to build capacity institutionally with regard to understanding and making meaning of Indigenous 'knowledges'. In this way, capacity building is shared and exchanged across and between Indigenous scholars and communities and mainstream educational institutions and researchers.

Key themes that relate closely to deliberations about how to ensure cultural relevance, competence, and sensitivity of screening, assessment, and analysis processes include:

- Involving Indigenous scholars, researchers and communities in the design of assessment tools.
- Involving children, family and community in every aspect of assessment.
- Creating a cultural context to understand data collected.
- Ensuring linguistic relevance.

IV DISCUSSION & ANALYSIS: INSIGHTS AND ISSUES

In the preceding pages, a range of documents have been reviewed that capture some key insights and issues related to the screening and assessment of child development. Many insights and issues recurred across several documents while some noted were more unique to particular authors. Section I described literature related to early childhood screening assessment more generally. Section II focused more specifically on articles that explored Aboriginal early childhood screening and assessment. Both sections included literature providing comment related to standard, more traditional approaches used in the early childhood field such as the Ages & Stages Questionnaire, the Battelle Development Inventory Screening Test, the Brigance Screen, and the Gesell Developmental Assessment. As well, the literature described in each section included and explored less traditional methods, most particularly the Assessment for Learning approach which has become more popularized in recent years.

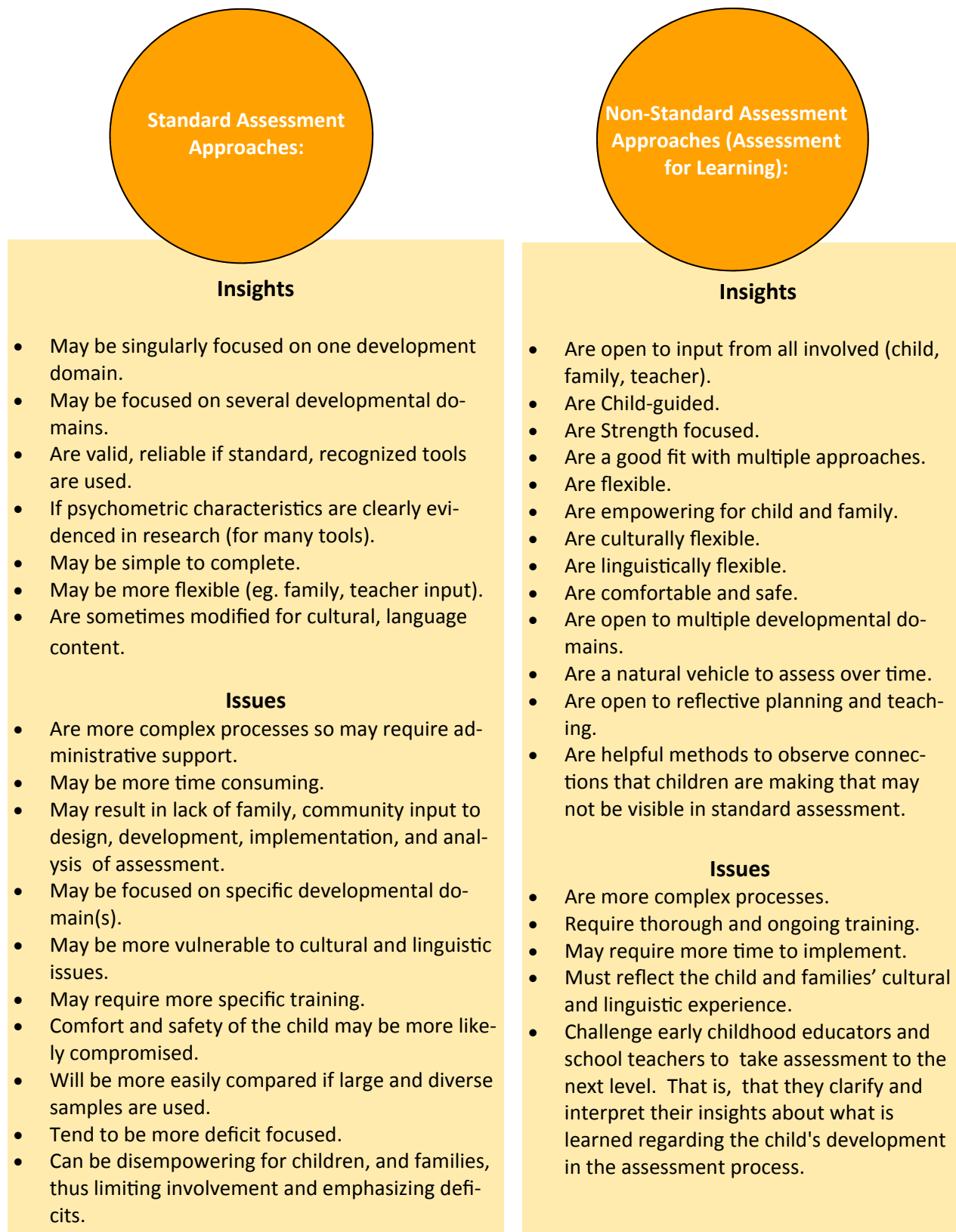
For the purpose of this discussion these approaches have been categorized as *Standard Assessment Approaches* and *Non-Standard Assessment Approaches (Assessment for Learning)*. The literature related to both standard and non-standard approaches spoke to both the growing need to address the cultural and linguistic relevance of the tools and methods used and the increased call for parent, family and community involvement in all aspects of the assessment (including development, planning, analysis and feedback). However, because of the historical, cultural, and linguistic experience of Aboriginal children and their families, the cultural relevance of the tools and methods and the

involvement of child, family and community in the assessment processes were viewed as even more essential to address the implications of cultural and community realities on child development. Additionally, the knowledge, skill and cultural competence of the assessor and her/his ability to use multiple approaches reflective of multiple developmental domains were suggested to be critical in the AECD setting. Seven categories are incorporated in Figure 1. These categories are intended to reflect and summarize the key themes relevant to effective screening and assessment extracted from the discussion across all of the documents reviewed with particular emphasis on those relevant to AECD. The categories identified include: *Linguistic Relevance*; *Child-focus*; *Cultural Relevance & Sensitivity*; *Developmental Appropriateness*; *Competence of Assessors*; *Assessment Approaches*; and *Parent, Family, & Community Involvement*. Each theme is detailed more fully in Figure 1.

To explicate the differences between the two broadly defined categories, the related themes described above, and the associated insights and issues, two 'streams' of insights (strengths) and issues (challenges) were created for each of the Standard and Non-Standard approaches. Figure 2. provides a synthesis of the strengths and challenges revealed across the documents related to the two categories of approaches. The insights and issues in Figure 2, while applying to ECD assessment approaches generally, are intended to be particularly relevant to effective AECD screening and assessment. For example, because of the emphasis on underscoring effective AECD screening and assessment processes, the literature analysis has deliberately made more visible such attributes as cultural and linguistic flexibility, cultural competence, professional sensitivity and reflective practice, empowerment, and strengths-based approaches. While these attributes may be seen by some as competing with the validity, reliability, and standardization offered by the Standard Assessment approaches, they are believed by the authors of this paper (and the Project Advisory Committee whose comments are detailed on p. 28) to support approaches that are more reflective of the traditions and values of Aboriginal communities. This was also supported in literature reviewed for this report (CCL, 2007). Further, it may be possible to combine approaches as needed to reduce the potential conflict between the two and strengthen the effectiveness of both.

FIGURE 1—Categories of Insights Related to Screening and Assessment Tools & Approaches

Linguistic Relevance	Child-Focused	Cultural Relevance and Sensitivity	Developmental Appropriateness
<ul style="list-style-type: none"> Ensuring the language used is relevant and easy to comprehend. (This varies across developmental stages and is influenced by the family’s first language and cultural context.) Language used in interpreting data will influence the way it is received and understood. 	<ul style="list-style-type: none"> Ensuring assessment environments are familiar, safe and comfortable. Ensuring a strength-based approach is used (that is, focus on what children know and can do rather than what they do not know or are unable to do). Ensuring that assessment is a process that empowers and builds self-esteem and confidence. 	<ul style="list-style-type: none"> Ensuring that the tool used for assessment is reflective and respectful of the child’s culture (values, customs, traditions) and ethnicity. The analysis of the assessment data considers contextual factors and is responsive to parent and family input at each stage. Families inform what is measured and what is done once information is collected. 	<ul style="list-style-type: none"> Ensuring that the tool used for assessment is reflective of the age and stage of child development. Ensuring that the tool used reflects a holistic framework – that is, social, emotional, cognitive, physical and spiritual aspects of development are all considered. Available and appropriate resources for family and ECD practitioners.
Competence of Assessors	Assessment Approaches	Parent, Family, Community Involvement	
<ul style="list-style-type: none"> Assessor is well trained, culturally sensitive, and culturally competent. Assessor is able to judge the suitability of the tool for the assessment they wish to undertake. Assessor is committed to an ongoing and multi- approach process rather than an ‘isolated’ assessment event. Assessor is skilled at engaging children, families, community, other co-workers, and other professionals in the assessment process. 	<ul style="list-style-type: none"> Assessment tools are reliable and valid (determined through a psychometric evaluation). Assessment approaches comprise multiple developmental domains. Assessment tools are viewed as only one aspect of an overall assessment process. Multiple approaches are used to ensure the child’s development is considered holistically and over time. 	<ul style="list-style-type: none"> Inclusion and involvement of parents, families, guardians, teachers, Elders, and community members throughout the assessment process – that is, before, during and after assessment. Providing families with information about screening and assessment – what it is and why it is important. Child development is considered in an ecological context: the family, community and culture are seen as interactive developmental influences and therefore essential to gathering and understanding assessment data. 	

FIGURE 2 — Standard and Non-Standard Assessment Approaches: Insights & Issues

In February, 2013, the BC ACCS organized a child care advisory committee to inform and advise the literature review project. Committee members reviewed the document and commented on the category ‘themes’ as well as the ‘themes’ generated from the literature that describe the insights and issues experienced when using the standard and non-standard approaches to screening and assessment. There was consensus among the members at the meeting that Figures 1 & 2 provided an accurate reflection and overview of the strengths and challenges experienced by the AECD field when using the different screening and assessment approaches. Indeed, the committee reinforced several of the issues and stressed the importance of not only communicating with parents, family, and others about an upcoming assessment but also ensuring that they are informed following the assessment process and that their input be considered an essential part of the assessment. They also suggested that it was not just that information needed to be communicated between professionals and family but that it is urgent to increase sensitivity about *what* information should be communicated and *how* that information is communicated. The committee stressed that it is this exchange between families and professionals that is so critical to build trusting relationships with parents to encourage them to include their children in screening and assessment activities. One of the examples shared by the committee was the idea of assessment being a ‘test’. They believed that using language that suggested ‘testing’ children can disempower or discourage parents who may be worried that the purpose of the test is to find something wrong with their child. The committee expressed concern that this disempowerment can be compounded in Aboriginal families because of past negative experiences with school and government institutions.

V SUMMARY & CONCLUSION

As noted in the introduction, this literature review has three purposes: 1) to develop a greater understanding about the uses, approaches, processes, and efficacy of existing child development screening and assessment methods - particularly for Aboriginal children; 2) to inform the development of a survey tool that will obtain the perspectives of ECD professionals about the usefulness and relevance of existing child development screening and assessment methods; and 3) to inform the development of curriculum that will support skill development of ECD practitioners in this important area.

The documents reviewed for this report included a diverse range of publications that examined: survey tools and methods and their general effectiveness; challenges related to using the standard tools and methods with Aboriginal children in early childhood programs; and ways to improve cultural relevance and sensitivity of research, assessment and curriculum development processes that promote more positive experiences and more accurate measurements of Aboriginal children’s learning. The synthesis and analysis of the literature created a comprehensive list of insights (strengths) and issues (challenges) related to both screening/assessing young Aboriginal children and the assessment of children and youth more generally. Issues and insights listed in the analysis process were divided into two separate categories including *Standard Assessment Approaches* and *Non-Standard Approaches* (including primarily *Assessment for Learning (re-conceptualist) Approaches*). The synthesized and analyzed data will be used to inform the questions for a survey of practitioners whose responsibility it is to undertake screening and assessment. The data collected in both the survey and the literature review processes will help to identify the essential components of the child development screening and assessment training that BCACCS will initiate in the coming months.

It was clear in the literature that there were many concerns originating with parents/families, professionals, and researchers that questioned the efficacy and sensitivity of child development screening and assessment tools for Aboriginal children. Assembling the full range of issues and insights through this literature review and subsequent processes will ensure that methods currently used for assessment purposes as well as those developed in the future will be more reflective of the interests, values and aspirations of Aboriginal families for their children and the cultural context of their lives. Until screening and assessment processes are developed specifically for the Aboriginal population, finding ways to strengthen existing approaches to be more culturally and linguistically relevant and responsive will better support and promote essential contributions by Aboriginal parents, family and community thus advancing holistic developmental outcomes for their children.

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