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The Early Development Index (EDI) is a teacher-completed checklist, intended to be a population-level tool to measure children's readiness for school and to alert communities to potential developmental problems in children. In response to the increasing popularity of the EDI, this paper provides a critical and timely evaluation and identifies the areas for improvement and modifications. The paper aims: (1) to identify the limitations of the EDI as a universal screening tool, particularly with regard to children from culturally and linguistically diverse backgrounds (CALD); (2) to alert readers to the potential negative implications of the current EDI for communities and society, and (3) to recommend ways for improvement so that the EDI will become a valid and culturally appropriate screening tool for monitoring early development in CALD children. The ultimate aim is to help build an education system and a society that can respect cultural and individual differences.

Keywords: *School readiness; Early development; Universal programs, Children; Cultural and linguistic diversity*

Introduction

Background to the Early Development Index

Increasing evidence suggests that early childhood plays a vital role in creating and maintaining social, economic and health inequalities throughout the life course (Cynader & Frost, 1999; Keating & Hertzman, 1999; McCain & Mustard, 1999). Early development from conception to six years of age establishes the foundation for learning, behaviour and health throughout the life cycle (Cynader & Frost, 1999; Keating & Hertzman, 1999; McCain & Mustard, 1999).

In response to increasing awareness of the importance of the early years and their impact on children's later development and life chances in adulthood, there has been a growing interest in pre-school children's readiness to learn in developed Western

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countries. Canada has been at the forefront of this movement (Governor General, 1999). In the province of Ontario, researchers working at the Offord Centre for Child Studies (previously known as the Canadian Centre for Children at Risk) have developed the Early Development Index (EDI) to measure the school readiness of Canadian children (Janus & Offord, 2000). It is intended that the EDI be completed for all preschool children within a defined population area and that data be used solely for the purpose of mobilising that community to maximise the school readiness of those children (Janus & Offord, 2000). The EDI has been implemented in most Canadian provinces. In British Columbia, for example, the Human Early Learning Partnership group has used it to map children's school readiness in most of the provincial territory (Hertzman *et al.*, 2002). A similar province-wide mapping is under way in Manitoba.

Most recently, the implementation of the EDI has been gaining momentum in Australia. With minimal modification to terminology (e.g. washroom versus bathroom) and aspects of the protocol (e.g. the addition of a parent consent form), the EDI was first piloted in Perth, Western Australia in 2002. In 2003 it was implemented in all government and non-government schools in the North Metropolitan Region and in selected rural sites in southern Western Australia (Hart *et al.*, 2003). In 2004, the Australian Early Development Index (AEDI) Project was launched under the 'Building Better Communities for Children' Program (Royal Children's Hospital Melbourne, 2005), which is jointly funded by the Australian Government and the Shell Company of Australia. The AEDI is now being piloted throughout Australia in a project that is administered by the Telethon Institute for Child Health Research and Centre for Community Child Health. The EDI is also gaining popularity in the Northwest of the United States. The planning for the implementation of the EDI is under way in King County of Washington State (Horsley & Ciste, 2005), where a significant proportion of the population are from culturally and linguistically diverse backgrounds, particularly in Seattle.

Five developmental domains of the EDI

The EDI is a teacher-completed checklist comprising over 100 questions that measure functioning in five developmental domains: social competence, emotional maturity, physical health and well-being, communication skills/general knowledge, language and cognitive development. The social competence domain draws on teachers' reflections on the child's curiosity about the world, eagerness to try new things, respect for authority and cooperation with others. The emotional maturity domain consists of teachers' answers to questions concerning the child's ability to reflect before acting, deal with feelings and respond to others' feelings at an age-appropriate level. The physical health and well-being domain of the EDI covers the information provided by teachers about a child's gross and fine motor skills (e.g. the child's ability to run in the playground and hold a pencil), the child's energy levels for classroom activities, and level of independence in meeting their own needs. The general knowledge and communication skills domain includes questions regarding

the child's ability to communicate needs and desires in socially acceptable ways, their ability to understand and communicate in English, and their knowledge about life and the world around them at an age-appropriate level. The language and cognitive development domain is intended to measure children's reading, writing and numeracy skills, their ability to understand and communicate the meaning of words, and ability to recite from memory.

Theoretical underpinnings

Janus and Offord (2000) chose social constructionist and interactionist theory to guide the development of the instrument and the process of community mobilisation that surrounds its implementation. The social constructionist approach considers how children's development is supported in the community. It emphasises a community-level measurement strategy that entails multiple assessments, multiple respondents, sensitivity to local, cultural and ethnic issues, a balance between positive and negative indicators of readiness, and willingness for action based on results. The interactionist view proposes that readiness to learn is a relative concept and that it is influenced by a range of factors that include the skills, experiences and learning opportunities the child has had and the perspective and goals of the community and school. The proponents of this approach suggest that the assessment of readiness to learn takes place over time. These perspectives seem to be a sound theoretical basis for the development of the EDI. However, a question arises: are the instrument and the way it is implemented coherent with social constructionist and interactionist theory?

Main findings

The EDI has been implemented in over 150,000 children aged 4–6 years across Canada. The most complete findings have been reported by the Offord Centre for Child Studies (McMaster Children's Hospital, 2004) and the Community Asset Mapping Project in Vancouver and British Columbia (Hertzman *et al.*, 2002). These findings are representative of the Canadian children living in mid-sized to large urban centres. In a nutshell, the results of the Canadian implementations demonstrate that children's readiness to learn is associated with the socioeconomic status, and cultural and ethnic backgrounds of the families and communities in which they live. They suggest a higher level of 'vulnerability' in children from non-dominant cultural backgrounds, such as Aboriginal (Janus, 2002) and newly immigrated families (Hertzman *et al.*, 2002).

The implementation of the EDI in Western Australia has generated similar results. First, for each of the five developmental domains, Aboriginal children scored significantly lower than other children. The greatest difference was found in the language and cognitive development domain. Second, children who spoke English alone scored significantly higher than those who spoke English and another language. Further, children who spoke English as their second language scored

poorest in two of the five domains: language and cognitive development, and general knowledge and communication skills.

Critical evaluation of the EDI

This paper has three objectives: (1) to identify the limitations of the EDI as a universal screening tool, particularly with regard to children from culturally and linguistically diverse backgrounds; (2) to alert readers to the potential negative impact of the current form of the EDI on communities and society; and (3) to recommend ways in which the EDI and its implementation can be improved so that it will become used as a valid and culturally appropriate means of screening the early development of children from culturally and linguistically diverse backgrounds.

The motivation to write this paper stems from the knowledge that Indigenous people in both Canada and Australia have expressed their unhappiness with the EDI in its present form. In Canada, Indigenous communities do not identify themselves with it because they view the EDI as inappropriate for them (Maggi & D'Angiulli, 2004; Wiens, 2004). One criticism is that, similar to the application of psycho-educational tests to Aboriginal children, the EDI results pertaining to Aboriginal children may simply reflect the consequences of endemic generational disadvantages created by an inherently racist and colonialist educational system evolved from the Canadian residential schools in the 1880s (Wade, 1995). While there are no published reports, the authors can confirm that similar concerns have been expressed by Aboriginal people in Western Australia (communications with Aboriginal researchers and parents in WA, 2005).

We believe it is important to separate a critical evaluation of the instrument itself from the process of implementation for two reasons. First, the instrument may be working very well when the process of implementation is flawed, and vice versa. Second, an evaluation of the instrument must focus on its psychometric properties and the extent to which the five developmental domains adhere to the theory that underlies its development. On the other hand, an evaluation of the implementation should focus on the amount of community 'buy in', the degree to which communities begin to mobilise resources for children and families, and ultimately the proportion of children in any given community who are 'school ready'.

The evaluation begins with a discussion of the strengths and limitations of the instrument itself, as a universal screening tool, and it moves to a discussion of the process of implementation before finishing with suggestions for modifications and improvements.

Strengths and limitations of the EDI

Strengths as a universal screening tool

The EDI is a universal screening tool for identifying markers of early development that indicate a child's readiness for school. No specific individuals or subgroups in a geographic area (e.g. State, Province, City or School Catchment Area) are targeted for intervention. Instead, all children in the area are invited to participate. As a

universal tool, the EDI has several advantages. First, it is cost-effective to implement and it is widely applicable, with global possibilities. Second, the results of the EDI are not intended to be interpreted for individual children and, thus, it potentially avoids the problem of labelling children as 'at risk' or 'vulnerable', as the authors have repeatedly emphasised (Janus & Offord, 2000). Third, it sets the stage for subsequent targeted programs. Target programs run the risk of labelling identified individuals when there is no universal program in place first. There is evidence that labelling can lead to negative outcomes, such as antisocial behaviour, which targeted interventions aim to reduce (Offord, 2000). Fourth, because the EDI is intended for all children living within a suburb or postcode area, it is intended to be a surrogate indicator of how well a community is performing in raising its children (Hart, *et al.*, 2003). This has important implications for policy and interventions that will potentially address the social contexts in which individual families function and children develop in their early years, such as schools and neighbourhoods.

Limitations as a universal screening tool

One of the authors of the EDI has already pointed out two of the more obvious limitations of a universal screening tool, such as the EDI: (1) there is little benefit to individual children and families, and (2) the greatest effects are often seen in those at the lowest risk (Offord, 2000). While acknowledging the importance of these insights, this paper will focus on some limitations of the EDI that have not been previously identified.

Lack of evidence for the validity and reliability of the EDI for Aboriginal and CALD communities

In an unpublished paper, Andrich and Styles (2004) report using data collected for 4600 preschool children from both the north metropolitan and rural areas of Western Australia in 2002 and 2003 to assess the psychometric properties of the EDI. A Rasch model was used to establish whether the 'latent' constructs (namely the five domains of the EDI) were operationalised successfully by the questions asked and the scales used. On this basis, the EDI appears to have good psychometric properties. However, to our knowledge, no such independent assessment of the EDI was undertaken in Aboriginal and CALD children.

Janus and Offord have presented several conference papers that report on the reliability and validity of the EDI (Janus, 2001, 2002; Duku & Janus, 2004). In terms of the inter-rater (e.g. teacher–parent) consistence, test–retest reliability and the predictability of performance on tests of verbal and nonverbal ability, the EDI appears to be a reliable and valid indicator of children's early development and readiness for school. However, the reliability and validity of the EDI has never been formally established in a peer-reviewed journal article. Moreover, data for CALD and Aboriginal children are scant and there are many issues regarding its use with these children that warrant attention. One study, for example, suggested that

parents' rating of behaviour failed to predict the EDI results in Aboriginal children (Janus, 2002). Therefore, despite the research that has been undertaken to date to evaluate the validity and psychometric properties of the EDI for the mainstream population of children, there remain several concerns about its use, particularly in Aboriginal and CALD communities.

Lack of sensitivity to linguistic diversity

The language and cognitive development domain of the EDI is designed to measure children's reading, writing and numeracy skills, their ability to understand and communicate the meaning of words, and their ability to recite from memory. Although English is the language of the majority population in both Australia and Canada, with French being the dominant language in Quebec, the use of English alone is not adequate for assessing the language ability and communication skills of minority children for the following reason.

For many of these children, the main language spoken at home is not English (Australian Bureau of Statistics, 2001), and for a large number of immigrant children there are two or more languages spoken at home. Thus, it is to be expected that the speed at which multilingual children learn English will be slower initially, compared with monolingual children from an English-speaking background. While many minority children do not have very strong English skills at five years of age, they may, in fact, speak their native language very well. Furthermore, research on bilingualism suggests that many immigrant children catch up with other children in learning English once they enter primary school (D'Anguilli *et al.*, 2004).

Following the implementation of the EDI in Western Australia, it was found that children who spoke English as a second language scored the poorest in two of the five domains, namely language/cognitive development and general knowledge/communication skills (Hart *et al.*, 2003). This raises two important questions: (1) Were these children appropriately assessed if English was the only language used? (2) How well does this result predict the development of literacy skills and subsequent academic achievement? Previous studies that have examined educational outcomes in multilingual students cast a further doubt on the validity of this finding. Most notably, students from Asian cultural backgrounds typically have higher mathematics grades than other students with a similar level of ability when they enter high schools and universities (Dandy & Nettelbeck, 2002; Nisbett, 2003). One reason for this may be that the ability to learn many ideographic symbols characteristic of some non-English languages, such as Japanese and Chinese, may enhance the numerical skills of these children. Evidence suggests that this type of learning may, in fact, benefit working memory and the ability to recognise and visually manipulate a range of symbols (Li *et al.*, 1999; Dandy & Nettelbeck, 2002; Li *et al.*, in press).

Recent findings from cognitive neuroscience suggest that learning a second language does not have negative consequences for cognitive development (Epstein *et al.*, 1996). On the contrary, the earlier—and more intensively—children are exposed to multiple languages the better. Based on the current body of evidence

from cognitive neuroscience, there is a consensus of scholarly opinion that growing up bilingual is beneficial to children's brain development (Foreman, 2002). Children who are exposed to more than one language may be slower than monolingual children to acquire the languages in the first place, but once they have learned two or more they appear to have a number of cognitive advantages, including greater attention control (Goetz, 2003) and hence ability to filter distractions and to switch back and forth between tasks (Foreman, 2002). Other advantages include an advanced understanding of the symbolic representation of print (Bialystok, 1997), a higher degree of behavioural and brain plasticity (D'Angiulli *et al.*, 2001), and higher academic achievement in language-related and as well as other academic areas (Lesaux & Siegel, 2003; D'Angiulli *et al.*, 2005).

Lack of sensitivity to cultural diversity

The general knowledge and communication skills domain includes questions concerning the children's ability to communicate needs and desires in socially acceptable ways, their ability to understand and communicate in English and their knowledge about life and the world around them at an age-appropriate level. Teacher responses to the items listed in this domain are potentially problematic for children in CALD families for three specific reasons. First, the assumption seems to be that English is the only communication tool.

Second, the notion of what is socially acceptable in schools and community is a cultural construct (Rogoff, 2003). Being open and assertive, for example, is indicative of good communication skills in Western culture, whereas reservation and shyness are encouraged in Asian and Muslim cultures. 'Speaking up' may even be interpreted as a sign of ignorance (Nisbett, 2003) and in the Aboriginal context a child is considered dull when she/he talks a lot and keeps asking questions (Kearins, 1988). Cultural constructs that govern individuals' beliefs and values are often reflected in communicative interaction (see Hwa-Froelich & Vigil, 2004) for a comprehensive review). For example, in cultural settings where independence and individualism are highly valued, individuals tend to communicate using more 'I' and '*you*' pronouns, and emphasis is placed on concepts such as autonomy, emotional independence, and individual initiative (Kim & Choi, 1994). Conversely, children from societies that value interdependence and social hierarchy will show quiet, respectful behaviour when communicating with adults. They tend to avoid talking, asking questions and stating their opinions in front of adults (Hwa-Froelich & Vigil, 2004). This behaviour may be mistakenly interpreted as evidence of poor language ability in a Western context. Similar variations in other cognitive areas such as attention and learning that are associated with different cultural backgrounds are also likely to be vulnerable to misunderstandings (Chavajay & Rogoff, 1999; Gutierrez & Rogoff, 2003).

Third, the questions that form the basis of this domain may not be appropriate for minority, particularly Aboriginal, children. Aboriginal languages are oral rather than written, and speech is considered important in combination with prosodic aspects of the language. Accordingly, hearing, listening, feeling and viewing are an integral part

of expressive language and communication (Atkinson, 2004). In contrast to traditional Western learning that emphasizes formality and verbal acumen, traditional Aboriginal learning is largely informal and non-verbal (Harris & Harris, 1988; Kearins, 1988). Aboriginal children are, therefore, much less likely to be accustomed to a verbal learning style when they begin school.

Culturally appropriate early learning

The general knowledge part of the communication skills domain of the EDI is questionable. Because the content is culturally bound, it may be biased toward children who have been immersed in Western culture from an early age. Shape, size and number, for example, are prerequisite to early learning in Western schools. Whilst most Western preschool children are exposed to these concepts in a rudimentary fashion, Aboriginal and CALD children are less likely to be exposed before the onset of primary school (Paradise, 2002). In Western cultures parents teach their children sequential counting from infancy (Kearins, 1988). The learning of number concepts is embedded in daily activities, such as playing counting games on fingers, hands and toes, and teaching rhymes and songs. However, the use of extended number systems has been not been a part of daily life in Aboriginal households. Historically, economies based on agriculture and animal husbandry have developed relatively complex counting systems, whereas hunting and gathering societies had no need to count beyond small numbers (Kearins, 1988). While Aboriginal children's numerical skills may not be as well developed as those of other children, they out-perform Western children in terms of their knowledge of where their home is located and also with regard to activities that require a higher level of speed, dexterity and visual skill, such as fishing, darts and card games (Kearins, 1988).

It should not be assumed that traditional knowledge and understanding is any less important to children in their early development. The practice of cultural imperialism historically played out in Canada and Australia and the consequent denial of Aboriginal knowledge and understanding may have impacted negatively on the health and well-being of Indigenous people. Many families hold spiritual beliefs that impact on every aspect of their daily lives. Aboriginal school children in both countries are now encouraged to learn about the culture, values and traditions of their people. Yet, the EDI fails to recognise the importance of this knowledge and understanding to Aboriginal preschool children, as it does not measure this aspect of their early learning. Behaviour, social competence, general knowledge and cognitive ability are all difficult to assess in an environment devoid of cultural context (Sternberg & Grigorenko, 2004).

Neither should one assume that preschool children who have not been exposed to Western general knowledge are at a great disadvantage once they commence formal schooling. Sternberg and Grigorenko argue that intelligence itself is a form of developing expertise (Sternberg & Grigorenko, 2004). These authors report one recent study conducted with Tanzanian children where they administered a series of

intelligence tests dynamically rather than statically. Dynamic tests differ in that children are given some kind of feedback to help them understand the questions asked in the test. The results showed significant improvements in performance after just 5–10 minutes of instruction following the initial test.

Lack of a longitudinal perspective

There is a great deal of empirical support for the notion that children's early development plays a major role in determining success at school and, in turn, future health and well-being (Keating & Hertzman, 1999; Shonkoff & Phillips, 2000). Negotiating the transition from external to self-regulation, acquiring the capabilities that undergird communication and learning, and learning to relate well to other children and forming friendships are key tasks of early development (Shonkoff & Phillips, 2000). A comprehensive assessment of a child's competence at the time of school entry, such as the EDI, should be correlated with future success at school and beyond. However, to our knowledge, it has not been established that the EDI accurately predicts future educational outcomes. It is well known that 'normal' development which follows a range of trajectories and measurements over time better predicts final outcomes. For the reasons discussed above, the EDI may not accurately predict future outcomes for Aboriginal and CALD children. Preschool children who experience more than one language and a different culture are less likely to be ready for Western school, but the evidence presented above suggests that most will catch up fairly quickly in a nurturing and supportive school environment.

Reliance on teachers' evaluations

Although both teachers and parents were consulted during the conceptual and content development phases of the EDI (Janus & Offord, 2000), the final implementation in Australia and Canada has been largely based on teachers' evaluations. Janus (2001) reported that the average parent–teacher agreement for the five EDI scales was 0.46 (0.35–0.66), but only two children in the sample (3.9%) were from CALD backgrounds. This level of discrepancy between multiple informants is not uncommon due to situation-specific behaviours and these figures support the observation that, from a very young age, children present themselves differently outside the home. How well children function within the home is just as important as how well they function at school. Indeed, the social constructionist theory favoured by the authors of the EDI advocates a multiple informant approach. The disagreement between parent and teacher ratings has even greater relevance for children from Aboriginal and CALD backgrounds, because these children are less likely to be adequately assessed by a teacher who has a different cultural perspective. Even culturally competent kindergarten and preschool teachers may underestimate the language skills of minority children, unless they have adequate knowledge of how well a child can speak his/her own language at home.

Implementation of the EDI

There are many potential benefits that the implementation of the EDI can bring to communities. The implementation is intended to lead to the mobilisation of resources for children and families, in terms of health and early education services, childcare and transport at the local level. It is also intended to bring service providers together to focus efforts on improving children's health and development, a coordinated approach called for by researchers and consumer/community groups.

However, based on the evidence that is available to date, it is doubtful whether the implementation of the EDI currently fulfils this potential for Aboriginal and CALD families. Specific issues are the amount of community 'buy in' in Aboriginal and CALD communities, the impact of the EDI in these communities in terms of the mobilisation of resources for these children and families, and ultimately the proportion of Aboriginal and CALD children who are 'school ready'. We question the assumption that it is best to make the child fit the school, because it is highly plausible that schools in Canada and Australia are not a good fit for Aboriginal and CALD children. To what extent, then, has the implementation of the EDI contributed to making schools more suitable for minority children?

Experience in Canada and Australia shows that when Aboriginal and CALD communities are in control of their children's education, they typically change the schools to better suit the needs of their children (Chandler *et al.*, 2003). Perhaps a compromise position is most appropriate, whereby minority children are integrated into the mainstream schools so that school segregation is avoided, and at the same time they are provided with the opportunity to participate in early learning of their culture and traditional knowledge and thus maintain their cultural identity.

The model of community control and community resource mobilisation is valid in theory, but there are factors that may preclude the successful implementation of the EDI in Aboriginal and CALD communities. Members of Aboriginal and CALD communities may not have the necessary knowledge and the capacity to take control of the project. If community engagement is minimal, then health, education and social professionals are solely in charge. Consequently, the process of implementation is questionable in terms of community buy in. Anecdotal evidence from Western Australia indicates that in many communities with large numbers of Aboriginal and CALD families, these groups are not involved in the EDI implementation. Even if Aboriginal and CALD communities do have members with the confidence to lead the implementation process, these people may not want to become involved if they feel that the EDI does not adequately measure the development of Aboriginal and CALD children (Maggi & D'Angiulli, 2004; Wiens, 2004).

Potential negative impact on community and society

One reason why some Aboriginal groups in Canada are reluctant to use the EDI is that they fear their community will be stigmatised if the results are negative (Parliament of Canada, 2001; Maggi & D'Angiulli, 2004; Wiens, 2004). In school districts where the results of screening tests similar to the EDI have been made

known to the public, some parents have reacted by changing schools (Herbert & Thomas, 1998; Harris & Mercier, 2000). Such screening programs could also have socio-geopolitical implications for small Aboriginal communities. Furthermore, there is a risk that negatively ascribed communities will be less able to compete with other groups for scarce educational, health and social resources. In some instances the individual children and families who reside in these communities can be easily identified and targeted. In British Columbia, for example, there are First Nations bands with a total population of 200 members or less.

Despite evidence to the contrary, the overwhelming message conveyed by the findings of the EDI implementation is that English as a second language in the preschool years leads to poor outcomes in language, communication skills and social competence in later life (Hart *et al.*, 2003) pp. 18–19). An unintended consequence of this understanding is that bilingual language development will be discouraged within families and the community, generally. Thus, the EDI may potentially stifle cultural and linguistic diversity.

This has important implications for countries such as Canada and Australia that highlight the significance of their great cultural and ethnic diversity. Some 23% of the Australian population, for example, is born overseas (29% in Western Australia) (McLennan, 1999; Plant, 2000). In Australia, one person in three has a culturally and linguistically diverse ancestry and approximately 15% of the population speak a language other than English at home (Australian Bureau of Statistics, 2001). Multiculturalism and linguistic diversity are both acknowledged to be advantageous to Canada and Australia with regard to economic and social imperatives. Policies based on hasty or careless interpretations of the EDI findings pertaining to minority children might actually counter the increasing recognition given to Indigenous culture as one of the most important determinants of health and wellbeing (Aboriginal and Torres Strait Island Research Agenda Working Group (RAWG) of the NHMRC, 2002). Such policies may potentially erode ongoing efforts to restore Indigenous culture and language in both nations. In Canada there is longstanding concern that seemingly progressive policies may be used to perpetuate the neo-colonialist agenda (Kelm, 1999).

Conclusion

The EDI reflects one conception of how children develop and what should and can be done to maximise health and developmental outcomes for all. However, this view is not universally held (Khan, 1999; Rao, 2000). Therefore, a modified appraisal system is highly recommended, one that is grounded in the cultural script of the family and community that provide the child's first learning experiences (Schuman, 2002).

The purpose of this paper is to stimulate interest in the development of a culturally appropriate instrument that can be used to adequately monitor the early development of children from culturally and linguistically diverse backgrounds. In this way, we can begin to build a society that can respect differences—the tempo of individual learning, the salience of one form of imagery, or of one sensory mode over

another, and the configuration of each individual's distinctive abilities. Only then will there be a possibility of elaborating on such individual possibilities and differences that reflect the learning styles of a culturally rich and a complex multicultural civilization (Mead, 1971).

Recommendations

In light of the comments made in this paper we recommend the following:

1. Qualitative research should be conducted in minority and immigrant communities to gain a better appreciation of culturally specific understandings of early development in multiple domains and to identify the communities' major concerns in early child development.
2. All researchers and teachers who are involved in the implementation of the EDI should be culturally competent (Valdivia, 1999).
3. The predictive validity of the EDI should be assessed against later school outcomes based on representative samples of children from diverse cultural and linguistic backgrounds.
4. In addition to the teacher's report, the EDI should utilise parent report as an important source of information for evaluating early development, particularly for minority and immigrant children. This would require recruitment and training of bilingual personnel (e.g. university students or volunteers with a bilingual background) as part of the research and implementation team. This would facilitate the assessment of a child's functioning in his/her native language.
5. The EDI should be implemented gradually in different stages as recommended for entering into a culturally diverse community (Kowalsky *et al.*, 1996). This would address the concern that the EDI implementation often happens too quickly without appropriate community consultation.
6. With increasing cultural diversity in many schools and the larger society, it is important for all children to become culturally competent with regard to both academic learning and social interactions. For this reason, cultural competence should be added as a new domain of the EDI. From the point of view of Aboriginal and CALD communities, the real task may be to better equip schools for Aboriginal and CALD children. Useful practical steps include: more teachers from ethnically diverse backgrounds, more teachers who are bilingual or multilingual, more culturally competent teachers, significant multicultural curriculum content, lessons constructed to facilitate the learning of the English language for children from non-English-speaking backgrounds, and culturally appropriate assessment of children's capabilities.

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