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School readiness: what does it mean for Indigenous children, families, schools and communities?

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Summary

What we know

- School readiness is a multidimensional construct, recognising the interplay of children's individual characteristics and the contexts in which they live, and have lived, as they grow and develop.
- School readiness incorporates three major components:
 - children's readiness for school
 - schools' readiness for children
 - the capacity of families and communities to provide the necessary opportunities, conditions and supports to optimise children's development and learning.

What works

- Schools that employ and value Indigenous staff provide 'ready' links between school, families and communities which can enhance the transition to school for Indigenous children.
- Positive professional links and regular communication between prior-to-school educators and school educators support children's transition to school.
- Positive involvement of families and engagement with other community members in Indigenous children's transition to school are important components of making a school 'ready'.
- High-quality early childhood education helps prepare children for school.

What doesn't work

- 'Lack of readiness' is not a problem of children being insufficiently skilled to learn at school, but instead it is where there is a mismatch between the attributes of individual children and families, and the ability and resources of the school and/or system to engage and respond appropriately.
- Assessment of Indigenous children through tests based in non-Indigenous culture can reinforce 'gaps' in knowledge and skills, rather than building positive images of Indigenous children as learners.
- Approaches to readiness and transition to school that focus only on developing Indigenous children's skills and not on broader factors such as schools, families and communities do not necessarily lead to improved school success.

What we don't know

- There is insufficient information on what Indigenous parents and communities understand by 'readiness for school'.
- There is no national agreement on what is important in terms of readiness for school, how to measure it and what the indicators of readiness might be.
- We don't know whether United States' and other international interventions will work in Australia.
- There is no solid evidence of benefits, particularly cost benefits, of many early childhood interventions in Australia.



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Introduction

There have been several literature reviews, topical papers and policy briefs in recent years, reflecting a growing interest across Australia in both the transition to school and perceptions of school readiness (see for example, Centre for Community Child Health, 2008a; Erebus International & Minimbah Consultants 2008; Farrar, Goldfeld & Moore 2007; McTurk et al. 2008; Smart et al. 2008; Sorin & Markotsis 2008). This growing interest is also seen in policy at national, state and local levels. For example, the Council of Australian Governments (COAG) has noted the early years as a critical time in development that influences children’s transition to school (COAG Reform Council, 2009; Commonwealth of Australia 2009b). These COAG commitments are reflected in the national Early Years Learning Framework (Commonwealth of Australia 2009a), which describes transitions as times of opportunity and challenge, recognising that many people and contexts contribute to successful transitions, including the transition to school.

The national roll-out of programs to support readiness, such as Home Interaction Program for Parents and Youngsters (HIPPY) (Dean & Leung 2010), and the move to provide a population measure of children’s readiness through the Australian Early Development Index (AEDI) (Centre for Community Child Health and the Telethon Institute for Child Health Research 2009) are further evidence of the political interest in school readiness.

At the state and local level, many school systems, districts and early childhood networks have developed approaches and programs to support children’s transition to school. These programs often address school readiness.

The transition to school is a focus point for considering school readiness (Boethel 2004), with the actions of children, families, educators and communities reflecting a range of perceptions and expectations. The transition process occurs over time and incorporates a broad range of experiences that together provide a solid basis for the start of school. Such experiences could include health and welfare services, community or parenting support programs and access to high-quality early childhood education programs (Ackerman & Barnett 2005; Centre for Community Child Health 2008a; Dockett & Perry 2007; Farrar et al. 2007).

There are many definitions of school readiness. Some refer to the skills and attributes of individual children, defining it as ‘the state of child competencies at the time of school entry that are important for later success’ (Snow 2006:9). Others are based more on holistic approaches, considering not only characteristics of the individual child, but also a range of influences on their development and learning, such as the family, school and community (Centre for Community Child Health 2008a; Dockett & Perry 2009; Vernon-Feagans et al. 2008).

In this paper, school readiness for Indigenous Australian children is investigated from the basis of the strengths of all concerned—children, families, educators and communities. Research is analysed and programs are described. An overview of these programs is provided in the section ‘Which readiness programs and activities have been developed both nationally and internationally?’, with more details provided in Appendix 2.

What is school readiness?

Early ideas about readiness focused on the characteristics of individual children, including their age, maturity and/ or academic skills (Kagan & Rigby 2003; Snow 2006). As a result, children were labelled as ‘ready’ or ‘unready’ for school. With the advent of the then US President Bush’s United States National Education Goal that ‘... all children in America will start school ready to learn’ (National Education Goals Panel 1991), broader conceptualisations of readiness have been promoted both in the US and internationally. These refer to readiness as multi-dimensional, recognising the interplay of children’s individual characteristics and the contexts in which they live, and have lived, as they grow and develop (Kagan & Rigby 2003). Representing this view, Meisels (1999:62–3) has argued that:



Readiness must be conceptualised as a broad construct that incorporates all aspects of a child’s life that contribute directly to that child’s ability to learn. Definitions of readiness must take into account the setting, context, and conditions under which the child acquires skills and is encouraged to learn. Assessment of readiness must, in consequence, incorporate data collected over time from the child, teacher, parents, and community.

Three components have been identified in broad definitions of readiness:

- children’s readiness for school
- schools’ readiness for children
- the capacity of families and communities to provide the necessary opportunities, conditions and supports to optimise children’s development and learning.

Aligned with these components are several dimensions, noted in Table 1. It is the interaction of each of these that constitutes readiness for school: each of the components and dimensions is considered necessary, but not sufficient, for children’s readiness.

Many of the state-based strategies for improving readiness developed in the United States in recent years have recognised these components of readiness (for example, First 5 2004; Rhode Island KIDS COUNT 2005; The Wisconsin Council on Children and Families 2003). Similar definitions have been promoted in Australia (Centre for Community Child Health 2008a,b; Dockett & Perry 2007, 2009; Farrar et al. 2007; Sorin & Markotsis 2008). In addition to these components, there is recognition that support for readiness needs

to go beyond individual communities to the broader societal level, where focus on the importance of the early childhood years, commitment to investment, supportive government policies and programs underpin notions of a ‘ready society’ (Dickens et al. 2006; Mustard 2006).

Broad definitions of school readiness are based in ecological theory (Bronfenbrenner & Morris 1998), which recognises the influence of the children themselves, family, school, community and the availability of appropriate services and support within conceptualisations of readiness for school. From this perspective, school readiness is a multifaceted construct, which incorporates a broad picture of children’s abilities, health, and behaviours, as well as the capacity of families, educational programs and the broader community to support children’s early learning and development (Boethel 2004; High PC & The Committee on Early Childhood Adoption and Dependent Care Council on School Health 2008).

Reflecting the different components, discussions of school readiness draw on the following three major bodies of research:

- children’s readiness—the relative importance and interplay of children’s skills and abilities across developmental domains. This literature includes issues related to the measurement of readiness and assessment of young children
- ready schools—the contributions of school contexts to children’s readiness
- family and community supports—readiness as an outcome of children’s early educational experiences and home environment.

Table 1: Components and dimensions of school readiness

Components	Dimensions
Children’s readiness for school (enabling them to participate in classroom and learning experiences)	Ready children have a wide range of skills and abilities across the dimensions of: <ul style="list-style-type: none"> • physical wellbeing • social and emotional development; approaches to learning • language development • cognition and general knowledge
Schools’ readiness for children	Ready schools: <ul style="list-style-type: none"> • provide necessary supports for children • have quality teaching and learning
Family and community supports and services that contribute to children’s readiness	Family and community services and supports promote: <ul style="list-style-type: none"> • access to high-quality and developmentally appropriate preschool programs • recognition of the importance of parents as teachers and support for parents to fulfil this role • provision of adequate nutrition, physical activity and access to health care

Source: Adapted from Ackerman & Barnett 2005; Dockett & Perry 2007; Kagan et al. 1995; National Education Goals Panel 1997.



Children's readiness for school

There is a great deal of research connecting readiness with child-specific factors that are linked to children's later school success. Some of this research focuses on the age at which children start school, despite recognition that age is not a reliable predictor of school success (Meisels 1999).

Considerable attention has also been directed towards children's cognitive and language skills at school entry and, more recently, to other developmental domains and their contributions to readiness (Arnold et al. 2006; Duncan et al. 2007; Janus & Offord 2007). For example, in addition to studies of children's literacy and numeracy skills (Blair 2001; Leigh & Gong 2008), there have been studies emphasising the importance of:

- children's physical and mental health (Cook, Schaller & Krischer 1985; Zubrick et al. 2006)
- emotional wellbeing, and social skills as they start school (Blair 2003; Mashburn & Pianta 2006; Stacks & Oshio 2009)
- some studies have considered the interaction of children's development across different dimensions and the implications of these at school entry (Hair et al. 2006).

Results indicate that all areas of development—not just cognitive and language domains—are important in promoting school success (Forget-Dubois et al. 2007). This approach was reinforced in *The Report of the Review of Aboriginal Education* (NSW Aboriginal Education Consultative Group Inc and NSW Department of Education and Training 2004) when it was recognised that 'a holistic approach to addressing the specific health, development and wellbeing needs of Aboriginal children in the context of strengthening the capacity of families and communities to meet those needs' was required in transition to school programs.

Recognition of the importance of developmental domains in readiness has spurred a range of assessment approaches, often focusing on levels of achievement in specific areas, as measured on a range of tests. While it is possible to identify such tests (Meisels 2007; Snow & Van Hemel 2008; Sorin & Markotsis 2008), problems with their use as school readiness measures have also been identified. Readiness tests are used much more in the United States than in Australia. However, there is debate about the appropriateness of assessing young children on high-stakes tests, and in particular, basing major educational decisions on the outcomes of such tests (Meisels 1999, 2007).

Pianta's (2004) analysis of over 70 published studies showed 'significant instability in the way children perform on formal assessments of academic and social skills

during the transition period'. Meisels (2007) describes young children as 'unreliable test takers', affected by the nature of the testing environments as much as the tests themselves. Further, he argues that testing children at school entry assumes that children have had access to the same learning experiences and opportunities before school and that they are all being prepared for the same educational context.

In addition to questioning both the validity and reliability of assessments, or indeed any single indicator of children's growth and development, researchers (Brown et al. 2007; La Paro & Pianta 2000; Meisels 2007; Snow 2006) have argued that assessments of readiness should be the start of an appropriate learning and teaching program, rather than a prediction about how performance levels are linked to future school success. This argument supports a view of readiness as a relative construct, where teachers in different schools will have different definitions of what is required to engage effectively in their classroom environments. Parents and caregivers are likely to have different views of readiness from educators (Barbarin et al. 2008; Hatcher & Engelbrecht 2006). It also supports children's knowledge and skills being considered relative to the opportunities they have experienced (Graue 2006; Kagan 2007; Meisels 2007).

Following from this, readiness is not something that children should be required to demonstrate before they start school; rather, it develops within environments where adults and peers support children's learning and development through participation in meaningful and relevant experiences (Rogoff 2003). Despite growing support for the view of readiness as relative, there remain jurisdictions in which measuring children's skills is the main focus of school readiness assessment. Caution is required when considering the adoption of such approaches (McTurk et al. 2008; Meisels 2007).

Alternative modes of readiness assessment, including observational assessments (Meisels et al. 2008), those that focus on children's learning and development across the first year of school (Tymms et al. 2004) and population measures such as the Early Development Index (EDI) (Janus & Offord 2007) and the AEDI (Centre for Community Child Health & the Telethon Institute for Child Health Research 2009) have been proposed. Meisels (2007) has argued that any assessment of readiness should consider not only child outcomes, but also program and support evaluations and home, school and other learning environments.

Various approaches to the assessment of children's school readiness are employed across Australia. Rather than those to determine whether or not children should enter school, such assessments occur once children



have commenced school and are intended guide learning programs in the first year (Dockett & Perry 2007). While these may not be the high-stakes tests used in the United States, the same cautions about formal assessments for young children apply. A recent review notes that few studies have assessed Indigenous and non-Indigenous cohorts separately. Indigenous children typically do not perform as well on standardised assessments as their non-Indigenous counterparts, and there is call for the development of suitable tools for assessing Indigenous children's school readiness (McTurk et al. 2008).

Ready schools

Broad definitions of readiness emphasise the role of schools engaging children in meaningful and relevant learning experiences, in keeping with the premise that readiness develops in environments which offer support and challenge (Hair et al. 2006; Rogoff 2003), and that the school environment impacts on student outcomes (Frigo et al. 2004; Marcon 2002).

As part of the focus on defining readiness, the United States National Education Goals Panel (Shore 1998) identified 'ten keys to ready schools'. Recent adaptations highlight the importance of the following characteristics of ready schools:

- strong leadership; continuity between early education and school programs
- support for positive transitions
- respect for diversity and commitment to each child as a successful learner
- focus on promoting learning for all, including adapting educational programs as appropriate for individual children
- professional teacher preparation and opportunities for professional development
- supporting and welcoming learning environments, including appropriate class sizes and quality curriculum
- strategies to promote ongoing student attendance and achievement
- commitment to family engagement
- recognition of children as members of communities (adapted from Ackerman & Barnett 2005; Arnold et al. 2006; Clark & Zygmunt-Fillwalk 2008; HighScope Educational Research Foundation 2007).

Each of these characteristics has been identified as important in promoting readiness. For example, promoting continuity between prior-to-school services and transition to school programs has been noted as assisting children and families to feel comfortable, valued and successful at school (Clark & Zygmunt-Fillwalk 2008; Dockett, Mason & Perry 2006). Children who

participated in transition programs were judged by first-year teachers to make more positive adjustments to school than their peers who had not participated (LoCasale-Crouch et al. 2008). In addition, transition practices involving families can promote ongoing family involvement in school activities (Dockett et al. 2008; Schulting et al. 2005).

Clearly, 'ready' schools require 'ready' teachers and other staff who are able to support the listed characteristics of ready schools. In his work in Cherbourg State School, Sarra (2005) has reinforced the need for high expectations of all involved in Indigenous children's education and for strong community/school relationships. The notion of challenge within a supportive environment is critical. While expectations need to be high, young children starting school need to establish their identities as successful school learners in ways that show school is 'for them' (Department of Education, Training and the Arts 2007; Dockett & Perry 2007). Hence, teacher education programs, both pre- and in-service, need to instil these expectations. More generally, teacher education programs should address notions such as 'ready schools' for all students, including Indigenous children.

Programs that focus on the transition to school can help set a school climate that demonstrates respect for individual learners and fosters a sense of belonging for both children and families (Dockett et al. 2008; Margetts 2007; Peters 2010; Rimm-Kaufman et al. 2000). Such a climate is necessary to promote the engagement of all children, but can be particularly important for children from minority backgrounds (Dockett et al. 2008; NSW Aboriginal Education Consultative Group Inc. & NSW Department of Education and Training 2004; Purdie et al. 2000).

School environments that are welcoming and supportive demonstrate this in both their curriculum and organisation. For example, school organisation that promotes effective learning addresses issues such as class size—with children in smaller classes consistently outperforming those in larger classes (Finn et al. 2003). Further, curriculum and pedagogy that uses culturally appropriate approaches—including children's home languages (Arnold et al. 2006)—and recognises cultural ways of knowing (Martin 2007) can promote engagement with school for Indigenous children and families (Department of Education, Training and the Arts 2007; Dockett et al. 2008; Frigo et al. 2004). For example:

When our children engage in the journey of education that does not do violence to their culture, it teaches them to dream of possibilities and not be a prisoner of certainty. It teaches our children to be the best they can be. Education that welcomes Indigenous identities reinforces Indigenous cultural views of the world (Rigney 2001).



In some Canadian as well as Australian contexts, recognising more than one way of knowing has been critical for schools to promote learning success for all children (Canadian Council on Learning 2007; Fasoli et al. 2004). A direct result is the need for schools to employ and value local Indigenous staff who understand the culture and language and who can provide a link for Indigenous children between home, community, and school (Sarra 2005).

One of the key features of the school environment is the teacher. It is well established that teacher quality plays an important role in the delivery of quality curriculum and student achievement in the early years (Early et al. 2006; NICHD Early Child Care Research Network 2005). Positive relationships between families and teachers promote children's engagement with school (Department of Education Science and Training 2005; Keyes 2002). Positive teacher-child relationships are noted as a key factor in children's school success (Early et al. 2007; Hamre & Pianta 2001). Teacher-child relationships are bidirectional, with both teachers and children contributing to the nature of the relationship (Rudasill et al. 2006). When teachers and children have some common background, such as culture or language, teachers tend to view children positively (Saft & Pianta 2001).

This reinforces further the critical place of local Indigenous school staff in Indigenous children's schooling (Bethel 2006; Dockett et al. 2008; Fleet et al. 2007; Sarra 2005). Positive teacher-child relationships act as important social resources for children, impacting on their willingness to engage in learning experiences at school (Hamre & Pianta 2001). In particular, strong emotional support from teachers is linked to enhanced engagement and academic performance (Curby et al. 2009), and school policies and programs that promote positive teacher-child interactions are reported to facilitate children's school readiness (Mashburn et al. 2008).

Ready schools also promote family engagement—a key element in children's educational success (Henderson & Mapp 2002). This is influenced by factors such as socioeconomic status, cultural and language diversity, community expectations and parent or family characteristics (Huntsinger & Jose 2009; Lareau & Weininger 2008; Waanders et al. 2007). Critically, schools need to be ready to work together with families and communities to develop such engagement.

The power differentials between schools and individual families require schools to take an active role in leading such development. Partnerships between families and teachers facilitate a positive start to school and promote children's achievement (Brown 2009; Chan 2010). While some families find it challenging to engage with schools

(Miedel & Reynolds 1999), teachers play an important role in promoting family engagement (Peters et al. 2007) and reaching out to families (Angus 2009). The importance of positive relationships between teachers and Indigenous parents, and caregivers, in promoting engagement with school has been emphasised in Australian and overseas reports (Malatest & Associates Ltd 2002; NSW Aboriginal Education Consultative Group Inc. & NSW Department of Education and Training 2004). For example:

Teachers and school leaders are responsible for establishing positive prior-to-school relationships and supporting Aboriginal parents and students through the critical transition from home to school or from one world to another, by creating welcoming, family-oriented and parent friendly schools (NSW Aboriginal Education Consultative Group Inc & NSW Department of Education and Training 2004).

In all state and territory curricula in Australia there is specified core material to be learned. Across each school week or term, there is also a period of discretionary time, where schools can include additional experiences. This flexibility encourages schools to undertake learning activities of relevance to the local children, families and community. One way in which schools could be 'ready' for their communities is to involve them in decisions around the specification, activities and teaching of these discretionary parts of the curriculum. An example of this can be seen in the *Mathematics in Indigenous Contexts K–6 program* (Board of Studies NSW 2007). There is concern that some of this flexibility might be lost with the advent of an Australian curriculum (Burgess 2009).

Assessing the readiness of schools involves identifying indicators of the characteristics outlined previously. This has occurred in some US states, such as South Carolina, which has developed an assessment protocol which records student attendance, student:teacher ratios, parent involvement, reports of external program evaluations, teacher professional development, teacher qualifications and classroom environment (Freeman & Brown 2008). Similar programs have been developed in other US states (Brandt & Grace 2005; Gonzalez 2002; The Wisconsin Council on Children and Families 2003).

Key issues for Australian schools to be 'ready' for Indigenous children, families and communities centre on the relationships that these schools can build with all of these people, their willingness to honour and celebrate local Indigenous culture and knowledge, and their ability to recognise the strengths of the children and build from these in relevant and meaningful ways. All of this depends on the school professionals accessing the required knowledge and dispositions and enacting them from a strengths-based perspective.



Family and community supports for readiness

Children's early development and learning is promoted when they experience secure attachments with stable, dependable caregivers within consistent and predictable environments (Chazan-Cohen et al. 2009; MCEETYA Taskforce on Indigenous Education 2001). Clearly, what happens at home and within the community makes a difference to children's readiness and their educational outcomes (Forget-Dubois et al. 2009; Lapointe, Ford & Zumbo 2007; Weiss & Stephen 2009). The nature of parent-child relationships and quality of parenting, for example, exerts strong influences on children's learning and development, including school readiness (Centre for Community Child Health 2008a; Weiss & Stephen 2009).

The nature of the home learning environment has a major impact on children's school entry skills (Melhuish et al. 2008) and is a strong predictor of educational and behavioural outcomes for children well into the primary years (Sylva et al. 2009). There is wide variation in the home learning environments of young children, and this translates into wide differences at the start of school (Bradley et al. 2001; Duncan et al. 2004; Kamerman 2008).

In the United States, variation between children starting school—often described as a gap—is largely explained by race, poverty and differences in the home environment (Brooks-Gunn et al. 2007). Rather than decreasing, this gap appears to increase over each year of schooling (Condron 2009; Fryer & Levitt 2006).

There is consistent evidence that growing up in poverty can have a negative impact on children's development, including their perceived readiness for school (Barnett 2008; Hair et al. 2006; Smart et al. 2008; Webster-Stratton et al. 2008). This impact is reported to be the result of lack of resources and learning opportunities (both inside and outside the home) for children of families living in poverty, coupled with the quality of interactions between parents and children (Hilferty et al. 2009; Magnuson & Shager 2010).

Poverty remains pervasive in Australian society, with estimates that almost 15% of children live in families experiencing poverty. This figure is much higher for Indigenous children, with estimates suggesting that almost half live in families experiencing poverty (Hilferty et al. 2009). Such adults tend to feel that they have little control or capacity to manage change, and feel powerless to promote children's best interests. Often parents underestimate their ability to influence children's educational and learning outcomes through everyday interactions and conversations. This is particularly the case for those living in disadvantaged circumstances (Arnold et al. 2006).

However, it does not have to be so. Results from the Effective Provision of Pre-School Education (EPPE) project in the United Kingdom indicate that what parents actually did with children—the experiences and interactions they provided—was more important than who they were; in terms of educational backgrounds, SES and occupational status, for example (Melhuish et al. 2008). Siraj-Blatchford (2010:466–7) concludes that 'families do have the capacity to support their children in different ways when they have the will, the means and an understanding of the need to do so'.

A range of family and community supports has been developed to address disparities in children's learning and development before school entry (Fiscella & Kitzman 2009). These include programs of high-quality early childhood education, community-based health, parenting support and education, and programs supporting safe and nurturing communities.

High-quality early childhood education is described as both cost, and practically, effective in enhancing children's learning and development outcomes, including readiness (Fiscella & Kitzman 2009; Love et al. 2005; Melhuish et al. 2008; Reynolds et al. 2007). Evidence from a range of large scale experimental trials indicate that some of the largest benefits derive from programs that begin early in the child's life, employ well-qualified staff, have adequate adult:child ratios and create learning partnerships with parents (Barnett & Belfield 2006; Magnuson et al. 2004; Magnuson et al. 2007; NICHD Early Child Care Research Network 2003; Vandell et al. 2010). Home visiting programs, as well as centre-based programs, have demonstrated successful outcomes (Olds et al. 2007).

Early childhood programs that combine a focus on child educational experiences, and parentchild relationship building, have demonstrated positive effects on children's readiness for school (Bates et al. 2006; Homel et al. 2006; Turner et al. 2007). Community-based health initiatives, that encompass antenatal care through to programs supporting children of school age and their families, also have the potential to improve children's school performance (Currie 2005; Goldfeld & Oberklaid 2005; Janus & Duku 2007; Pascoe et al. 2007).

Neighbourhoods and communities influence children's outcomes (Berliner 2009). Kagan and Rigby (2003) conclude that ready communities provide safe, supportive and nurturing environments for children and their families. Links between neighbourhood environments and measures of children's school readiness (using the EDI in Canada and the AEDI in Australia) have noted the importance of neighbourhood culture, stability and heterogeneity in promoting preparedness for school (Centre for Community Child Health & the Telethon Institute for Child Health Research 2009; Lapointe



et al. 2007). As well as programs aimed at enhancing the physical safety of communities (Homel et al. 1999), those that enhance community connections can promote feelings of safety and confidence (Fasoli et al. 2004).

Implementation of the AEDI across the country in 2009 has provided some data about the readiness of children starting school. The AEDI uses teacher ratings of children's development across five domains, to provide a profile of children starting school in a particular community. Using this population measure, 23% of children starting school in 2009 were considered to be vulnerable in one of the five developmental areas; 12% of children were rated as vulnerable across two or more areas. Across communities, higher levels of disadvantage were related to higher levels of reported vulnerability (Centre for Community Child Health & the Telethon Institute for Child Health Research 2009).

An overview of readiness

The view presented in this paper is that school readiness is a multi-faceted construct in which children's abilities and health, family capacity, early childhood services and supports, schools, as well as the broader community, all play important roles (Ackerman & Barnett 2005; Dockett & Perry 2007; Kagan et al. 1995; National Education Goals Panel 1997). This view rejects the perspective that readiness for school resides in individual children, and so rejects the notion that some children could be considered 'unready' for school. Rather, it argues that children's readiness and later success at school is influenced not only by their own abilities, but also by the readiness of the school, family and communities in which children live. Woodhead and Moss (2007:13) summarise this view in their comment that 'readiness is best understood as the match between the child and the institutions that serve the child. It requires participation of families, schools and communities'.

Links between school readiness and the health and learning aspects of early child development

Physical health and wellbeing

While there are limited studies directly linking children's physical health and school readiness, there is evidence that teachers rank physical wellbeing (being fit, rested

and well-nourished) as a key element in their adjustment to school (Lara-Cinisomo et al. 2008). Further, children who experience physical problems are also more likely than healthy peers to be retained in grade (Byrd et al. 1997). Recurrent ear problems (e.g. otitis media) have been associated with poor school performance (Thorne 2004; Zubrick et al. 2006) and children with chronic illness or disability are more likely than healthier peers to have time away from school, which can contribute to poor academic performance (Cook et al. 1985).

Physical health and wellbeing encompasses a range of physical, biological and environmental factors, all of which can influence development and learning. For example, links have been established between:

- hunger, poor attention and learning (Weinreb et al. 2002)
- exposure to airborne toxins, including tobacco smoke, is associated with poor performance on cognitive assessments (Yolton et al. 2005)
- chronic health issues such as asthma and allergies are linked to reduced performance on school tasks (Currie 2005; Pascoe et al. 2007)
- time away from school and threats to relationships with peers and teachers (Currie 2005; Dockett 2004; Shiu 2004).

In some instances, coordinated programs addressing these issues have led to improved outcomes. One common example is the introduction of school breakfast programs and the subsequent increased attention and learning of children starting the school day well-nourished (Pascoe et al. 2007). In addition, breakfast programs can have positive impacts on children's school attendance and punctuality (Edward & Evers 2001). Where this is not already in place, there is much potential for breakfast programs to be enhanced by the inclusion of Indigenous Elders and community health workers, to promote the building of relationships and social connections.

Social, emotional and mental health

It has been suggested that children's mental health 'may be an even more important determinant of achievement than physical health' (Fiscella & Kitzman 2009:1076). Recent advances in neurobiology have emphasised the importance of the early childhood years, with evidence that 'early neurobiological development affects health (physical and mental) behaviour and learning in the later stages of life' (Mustard 2010:3). This research has highlighted the importance of secure attachment relationships in the early years and the significance of



these for optimal social and emotional functioning in later years. Secure attachment relationships—characterised by warm, sensitive and responsive caregiving—underpin children’s social and emotional wellbeing and mental health (ECA & SNAICC 2007). Parents too, have identified children’s social and emotional health as central to their view of school readiness (McAllister et al. 2005).

Several program approaches aimed at promoting school readiness focus on issues of social and emotional development. Some also have a parenting support component, recognising that the development and maintenance of strong, positive relationships within families is a key to children’s social and emotional wellbeing and mental health. Programs such as The Incredible Years and Parents as Teachers are reviewed later in this paper.

Trauma

Safe, secure environments and relationships contribute to children’s optimal development and learning. However, many children are exposed to circumstances characterised by persistent fear or anxiety and these can have long-term consequences (National Scientific Council on the Developing Child 2010). Definitions of trauma vary, but there is agreement that traumatic events, such as antisocial behaviour, substance misuse, abuse, violence and neglect, can produce psychological and physiological effects.

Prolonged exposure to such events can increase children’s levels of stress which, in turn, impacts on learning and development (Shonkoff et al. 2009; Van der Kolk 2007). For example, children who live in violent communities demonstrate higher levels of behavioural and emotional problems than those in less violent communities (Huth-Bocks et al. 2001). Children who have experienced trauma tend to lose their sense of safety and trust. This can be accompanied by a ‘reduced sense of their worth ...increased levels of emotional stress, shame, grief, and increased destructive behaviours’ (Atkinson et al. 2009:136). Further, such children can have ongoing health problems (Van der Kolk 2007).

Trauma can be transmitted across generations (Duran & Duran 1995) and whole communities can be affected. Addressing childhood trauma can involve not only approaches to prevention and intervention, but also to community recovery and capacity building (Atkinson 2002; Atkinson et al. 2009). Programs such as We-AI-Li (Atkinson 1994; Atkinson & Ober 1995) and approaches such as that taken in the Murdi Paaki project in NSW (Urbis Keys Young 2006), demonstrate that effective initiatives require a strong element of community engagement and that it is possible to build collaborative

and high functioning communities that support educational outcomes for all children and families.

Efforts to understand issues of readiness, learning and development, and the potential impact of trauma for Indigenous children and their families must take account of the social, political and historical contexts in which they live, and have lived. It is undeniable that some communities combat issues such as poverty, low socioeconomic status, high rates of substance abuse, community violence, high levels of incarceration or interaction with the criminal justice system, extensive loss of language and/or culture, low participation in education and high levels of unemployment (SCRGSP 2009). These factors have clear connection with outcomes for Indigenous children within these communities.

While important not to underestimate the nature and extent of such issues, it is evident that much can be done to address these by investing in services and supports for young children and their families, and their communities (Freiberg et al. 2005; Hutchins et al. 2007). Programs such as Pathways to Prevention (Homel et al. 2006) recognise the range of risk factors experienced by children, families and communities, as well as the strengths they demonstrate. Strengths-based approaches reflect ways of ‘working with people, based on social justice values that recognise people’s and communities’ strengths and facilitates their application to achieve self-determined goals’ (Beilharz 2002:4).

Health and education

Health and educational attainment are intertwined. Fiscella and Kitzman (2009:1074) note a ‘reciprocal relationship between health and education over time that contributes to disparities in each’, citing associations between lower levels of education and early onset of chronic illness and engagement in risk behaviours. They argue that enhancing children’s educational attainment will also improve health outcomes, and vice versa, concluding that there needs to be a much closer alignment of education and health policy than currently exists.

The connection between health and education is also promoted by McAllister et al. (2005) who frame school readiness as a public health issue. In particular, they focus on parents’ identification of social and emotional health as a condition of readiness. Many of the parents in their study sought community and program support for themselves and their children at school entry. For many African-American parents, such supports were linked to perceptions that their children would encounter racism and prejudice at school and concerns for the impact on children’s social and emotional strengths. Parents also recognised that they were making a transition as



their children started school and sought help to manage this process and develop appropriate supports for their children.

Recognition of the connection between health and education is a clear move away from a focus on readiness as a matter of cognitive skills and knowledge, towards a more comprehensive consideration of its many facets. Framing school readiness as a public health, as well as an educational, issue also facilitates thinking about the social and physical environments of children and families and how they contribute to perceptions of readiness. For example, it highlights the importance of physical safety, economic stability, social connectedness and cultural wellbeing for families as well as children (McAllister et al. 2005).

From this perspective, promoting school readiness involves attention to broad family and community issues, such as the appropriate provision of health services, early childhood education and parenting support. It also supports the notion of education and health systems working together—for example at the school level (Devlin & Asay 2005). Programs operating under the auspices of Best Start (Victoria), Families NSW and Sure Start (United Kingdom) provide examples of the interplay of health and education for families and young children, and the impact of integrated support for children's school readiness. These programs are reviewed later in the paper.

What do we know about the readiness of Indigenous children, families and communities?

Children's readiness

Assessments of the skills and knowledge of individual children consistently indicate that Indigenous children in Australia perform at lower levels on cognitive and language tasks than their non-Indigenous peers at school entry (Frigo et al. 2004; Leigh & Gong 2008; McTurk et al. 2008). Much of this gap is attributed to:

- socioeconomic status (Frigo et al. 2004)
- low preschool participation rates for Indigenous children (Biddle 2007; Purdie et al. 2000)

- the presence of risk factors in home and community environments (McTurk et al. 2008)
- differences between home and school environment, particularly in terms of language (Simpson & Clancy 2001; Tymms et al. 2004) and culture (Martin 2007; Windisch et al. 2003).

It is important to recognise that readiness is about more than cognitive and language tasks. However, evidence from the Western Australian Aboriginal Health Survey (WAACHS) (Zubrick et al. 2006) indicates that Indigenous children also experienced a range of social, emotional behavioural and health issues that were likely to impact negatively on their learning and engagement with school.

Schools' readiness

It is important to remember that many Indigenous children and families can be characterised by profiles of protective factors, and that risks can be lessened by strong family and community relationships and in educational and community contexts where there is genuine respect and commitment to promote the optimal development and learning of all children. These elements are seen in the practices of ready schools that:

- create a welcoming climate for Indigenous students and families, and promote a sense of belonging within the school (Dockett et al. 2006; Frigo & Adams 2002; Peters, 2010; NSW Aboriginal Education Consultative Group Inc. & NSW Department of Education and Training 2004; SNAICC 2004)
- employ and value Indigenous staff (Biddle 2007; Dockett et al. 2008; Frigo & Adams 2002; Sarra 2005; SNAICC 2004)
- promote cultural competence among non-Indigenous staff (Martin 2007)
- recognise differences between home and school and the value of each (Simpson & Clancy 2001), particularly the role and place of Indigenous knowledge (Frigo et al. 2004)
- employ culturally appropriate approaches to teaching and learning (Frigo & Adams 2002; Purdie et al. 2000; Thorpe et al. 2004), offer individualised instruction—or at least teaching approaches that are responsive to individual differences—and have high expectations of all children (Brown 2010; Sarra 2005)
- promote positive relationships between teachers and families, based on confidence and respect (Department of Education, Science and Training 2005)



- recognise the critical importance of positive relationships between children and teachers (Dockett et al. 2006; Thwaite 2007)
- implement transition to school programs that have multiple opportunities for the involvement of children, families, community members and educators (Dockett et al. 2006).

The focus on schools being ready for children is particularly important as it shifts the ‘problem’ of readiness—lack of readiness is not a problem of children being insufficiently skilled to learn at school, but instead is a mismatch between the attributes of individual children and families, and the ability and resources of the school to engage and respond appropriately.

Family and community supports for readiness

The role of the family and community in promoting school readiness is critical. The home learning environment makes a difference to children’s learning and development. Importantly, it is what parents do, rather than who they are, that makes the difference (Siraj-Blatchford 2010). This is another example of strengths-based approaches: even when families face challenges, the nature of interaction and experiences provided can enhance children’s learning and development. There are many ways to support families in these interactions—for example, home visiting programs, parenting support programs, and promoting access to resources and activities. There will be no one best way of supporting families.

Early childhood education

It is well established that access to high-quality early childhood education programs can enhance children’s readiness for school (Pianta et al. 2009). It is also well known that many Indigenous Australian children do not access centre-based preschool education in the year before they start school (FaHCSIA 2008). While the Australian Government has policies in place to achieve universal access to preschools for all Australian children (Commonwealth of Australia 2009b), it is clear that access is only one issue to be met for Indigenous children.

While the provision of services and supports in the local community is important, the mere presence of these is insufficient to promote readiness. The Stronger Smarter Institute (2010:4) noted recently that readiness cannot be regarded as ‘primarily a systems issue so that instituting early childhood education and increasing the participation in early childhood education of Indigenous

children will solve the problem. Rather, it is argued that engaging community members in appropriate training and provision of early childhood services could serve the multiple purposes of providing quality services, training and employment opportunities and promoting the importance of such services within the community. It is concluded that ‘there can be no school readiness without community readiness’ (Stronger Smarter Institute 2010:4).

With the advent of the AEDI (Centre for Community Child Health & the Telethon Institute for Child Health Research 2009) it is possible to map the resources and supports within communities and to compare these with children’s growth and development. Farrar et al. (2007:16–17) draw on the ‘readiness equation’ developed in the United States to note that:

School readiness is an outcome of the resources (including knowledge and skills), attitudes (including priorities) and relationships of a community. School readiness, conceptualised as the community’s readiness for the child, will vary from one community to another, and over time within the same community. Assessing a community’s level of preparedness for children is therefore required.

It has to be remembered, however, that communities are not homogenous and may include many communities within one. Many Indigenous communities were developed from disparate groups of people being brought together through resettlement. Relationships need to be built with all parts of these communities.

The importance of transition

The broad construct of readiness leads to consideration of transition—rather than a focus on readiness alone. Transition is a process that involves many people—children, families, educators, community members—in many ways. All can make a valuable contribution to learning and development as children start school. We know a great deal about effective transition programs (Dockett & Perry 2007, 2009). Indigenous children’s transition to school is promoted in the following circumstances:

- educators understand that there is a diversity of Indigenous cultures and languages in Australia, but that Indigenous people share ways of being, knowing, communicating and learning, that differ from those of non-Indigenous cultures, in relation to young children
- educators recognise that Indigenous children enter school as competent learners, with a range of skills and knowledge. The strengths-based approach extends to families as well as children



- learning is recognised as a lifelong process that occurs in multiple contexts
- transition to school is regarded as a process that takes time, and involves building and maintaining relationships
- relationships between health, wellbeing and learning are recognised and there is provision of integrated and coordinated services for children and families
- programs to support Indigenous children and families—whether they be focused on education, health or family support—are grounded in local Indigenous community knowledge. Any curriculum that is developed and implemented has content that is relevant to the local cultural, social, economic and historical context. School curriculum is meaningful, relevant and challenging for children
- transition programs involve staff well qualified in high-quality teaching and learning experiences
- high-quality early childhood education programs are available and accessible within the community
- schools are ready to teach Indigenous children in partnership with families and the community (adapted from Dockett et al. 2006; Dockett & Perry 2007; Erebus International & Minimbah Consultants 2008).

Which readiness programs and activities have been developed both nationally and internationally?

This section provides an overview of programs and activities that have been developed to support readiness. The list described below is not exhaustive. Programs were selected on the basis of their national or international standing, the quality of the evidence about their effectiveness, and/or the coverage of a specific component of readiness. In some instances, small scale programs developed for local contexts were included to demonstrate the nature of community-driven approaches. An overview of those that support school readiness is provided in:

- international programs (Table 2)
- general programs in Australia (Table 3)
- programs for Australian Indigenous children, families and communities (Table 4).

Further details of each program are contained in Appendix 2.

Review of these programs and activities suggests that effective programs have the following features:

- ongoing funding, often at the state or national level
- sufficient flexibility for local community or contextual input into the nature of the program or type of service made available. For example, Head Start funding is available for many different types of early education program, depending on the local context
- universal availability, often complemented by targeted programs
- involvement of local people within the programs. This is particularly important for Indigenous communities and services, where connection to the community can promote capacity building, as well as early childhood development and learning
- recognition of the strengths and capabilities of the children, families and communities involved
- a well-qualified workforce to deliver the program.



Table 2: Overview of programs supporting readiness—international

Program, agency	Location, duration	Target population	Evaluation	Outcomes	Key publications, websites
California First 5 California Children and Families Commission	California 1998–present	Children 0–5 years and families Universal	Ongoing independent evaluations are done annually	206 readiness programs across California Family literacy programs Comprehensive health screenings	http://www.cffc.ca.gov/pdf/help/Maindocumentfinal.pdf Bates et al. 2006
Sure Start UK government	UK nationwide 1998–present	Children and families Low SES	Ongoing independent evaluations	Program has led to better outcomes for children and families in the targeted communities	http://www.sprc.unsw.edu.au/media/File/Report2_09_Lessons_from_Sure_Start.pdf Katz & valentine 2009
Smart Start The North Carolina Partnership for Children, Inc.	North Carolina, USA 1993–present	Children 0–5 years Universal	Postive outcomes for children from low-income families	Evaluations of Smart Start are positive, though confounded by use of different services in different communities. However, after attendance at Smart Start centres, children from low-income families outperformed their non-attending peers at school entry. These improvements were sustained through the first year of school. In addition, the quality of child care provision had improved	http://www.hfrp.org/var/hfrp/storage/original/application/f2dd8f1de9603d4c6971851bf8c24ce5.pdf http://hugh.ncsmartstart.org/wp-content/uploads/2010/05/smartstart_tabbed_brochure.pdf Maxwell et al. 1998 FPG-UNC Smart Start Evaluation Team 1999
Incredible Years The Incredible Years	US & UK 1979–present	Parents/carers Universal	Randomised control trials	Classroom Management and Child Social and Emotion curriculum (Dinosaur School) linked with positive classroom management and higher levels of social and emotional competence	http://www.incredibleyears.com/library/items/preventing-conduct-problems-improving-school-readiness_08.pdf Webster-Stratton et al. 2008
Head Start US government	US nationwide 1965–present	Children 0–5 years Low SES Not otherwise targeted	Randomised control trials (Head Start impact study)	Increased academic performance for children attending Head Start, with effects still evident several years after leaving the program	Bradley et al. 2009 Love et al. 2005
Abecedarian Frank Porter Graham Child Development Institute	North Carolina, USA 1972–1985	Children 0–8 years Universal	Randomised control trials, longitudinal follow-up	Substantial readiness gains Positive effects still evident at age 21	Campbell et al. 2002
HighScope Perry Preschool Program HighScope Educational Research Foundation	Michigan, USA 1962–1967	Children 3–5 years Low SES Targeted to African-American children	Long-term ongoing evaluations	Demonstrated long-term positive effects of the program across multiple indicators	Hohmann et al. 2008



Table 3: Overview of programs supporting readiness—general programs in Australia

Program, agency	Location, duration	Target population	Evaluation	Outcomes	Key publications, websites
Brighter Futures NSW DoCS and 14 NGO lead agencies	NSW 2003–present	Children 0–8 years and families 'Vulnerable families'	Family survey, risk of harm reports, and intensive outcomes study (IOS)	Early findings indicate that the program is improving outcomes for families although the results vary across different groups	Hilferty et al. 2010
Smith Family, Let's Read Smith Family	Selected communities in most states and territories 2003–present	Children and families Low SES	Cluster randomised control trial	Results from the evaluation are not yet available	http://www.thesmithfamily.com.au/webdata/resources/files/LetsRead_LitReview.pdf
Best Start Department of Human Services (Vic)	Victoria 2001–present	Children and families Universal	Evaluation of the project using Owen's typology included five forms of evaluation: development, clarification, improvement, monitoring and impact (Raban et al. 2006)	The evaluation concluded that Best Start was successful in meeting all of its objectives and demonstrating considerable improvements in relation to its stated aims	http://www.education.vic.gov.au/ecsmangement/beststart/
Families First NSW NSW DoCS, DADHC, DET, Housing and NSW Health	NSW statewide 1999–present	Children 0–3 years and families Universal	Both qualitative and quantitative data in evaluation	An evaluation of the implementation of the Families First Strategy 1999–2003 found that Families First was having positive outcomes in terms of improving processes across the service network, but that competing demands across the levels of service delivery remain a challenge due to different understandings of what principles lead to effective system planning and delivery	Fisher et al. 2006
Pathways to Prevention Mission Australia & Griffith University	NSW, Vic, Qld & WA 1999–present	Children and families Low SES Cultural and linguistic diversity	Quantitative and qualitative evaluations	Results show an improvement in behaviour and communication for children as well as a strengthening of families across the community. Importantly, there has been high engagement with the Family Intervention Program with many families using more than one service	Freiberg et al. 2005 Homel et al. 2006a Homel et al. 2006b

(continued)



Table 3 (continued): Overview of programs supporting readiness—general programs in Australia

Program, agency	Location, duration	Target population	Evaluation	Outcomes	Key publications, websites
HIPPY The Home Interaction Program for Parents and Youngsters (HIPPY) (International & Australia)	Originated in Israel but now international, including Australia 1998–Present	Children 4–5 years 'Vulnerable' families	Multiple evaluations	International evaluation of HIPPY across different cultural settings indicates that the program improves future educational involvement for the parents as well as improved learning outcomes for the child. Australian evaluations confirm the international studies, with some important additions. The findings in Australia also demonstrate that HIPPY programs can improve the socio-emotional development of children as well as family attachment between parents/ carers and their children	Dean & Leung 2010
Good Beginnings Australia Good Beginnings	Nationwide 1997–present	Children and families	Qualitative data only	An evaluation of Good Beginnings programs conducted in 1999 and 2000 using interview data indicated that the programs were generating positive outcomes for the families and communities involved. More recent evaluations are not available	http://www.goodbeginnings.org.au/ Cant 2000
Parents as Teachers Parents as Teachers; Macquarie University and Access Macquarie in Australia	Originated in Missouri, US; adopted in many countries, including Australia 1980s–present 1991–present in Australia	Children and families Universal	Quasi-experimental and randomised control trials	Evaluations of programs in the US have reported significant positive benefits for children enrolled in the program. However, randomised control trials have reported limited differences attributable to the program	http://www.parentsasteachers.org/images/stories/documents/Executive20Summary_of_K_Readiness.pdf Drazen & Haust 1995 Pfannenstiel 1989 Wagner et al. 2001



Table 4: Overview of programs supporting readiness—programs for Australian Indigenous children, families and communities

Program, agency	Location, duration	Target population	Evaluation	Outcomes	Key publications, websites
Atitjere Transition to School Northern Territory Council of Government School Organisations (COGSO) Atitjere Community	Northern Territory 2008–2009	Children 4–5 years, families and community	Not available	Not available	Fasoli 2009
Foundations for Success Queensland Department of Education and Training	35 Indigenous communities in Queensland 2007–present	Indigenous children 3½–4½ years	Qualitative evaluation – Current	Not available	http://education.qld.gov.au/schools/indigenous/projects/foundations.html
Napranum Parents and Learning (PaL) Napranum Parents and Learning & Rio Tinto	2001–present	Indigenous children and Indigenous families	Process evaluation	A process evaluation undertaken in 2003, rated the program as highly successful	Hanrahan 2004 http://eprints.jcu.edu.au/70/
Maari Ma	Broken Hill, NSW 2000–present	Indigenous children and Indigenous families	To date, a detailed set of key indicators for Aboriginal children in the Maari Ma region has been compiled and this is to be used as to assess changes in outcomes for Aboriginal children	Not available	Kennedy et al. 2009
We-AI-Li Gnibi College—Southern Cross University	Lismore, NSW Early 1990s – present	Indigenous communities	Not available	Not available	Atkinson et al. 2009
Multifunctional Aboriginal Services Australia Locally implemented/ DEEWR-funded	Nationwide 1987–present	Indigenous children and Indigenous families	DEEWR currently conducting and audit of the implementation and management of Multifunctional Aboriginal Children's Services (MACS)	Audit due to be released in September 2010	http://www.earlychildhoodaustralia.org.au/australian_journal_of_early_childhood/ajec_index_abstracts/indigenous_child_care_leading_the_way.html



What are the data limitations and research gaps?

A great deal of information is available about school readiness. Much of this information is subjective, as people draw on their own experiences, or those of family and friends, to recall situations where educational decisions were made on the basis of someone deemed 'ready' or 'unready' (Dockett & Perry 2007; Graue 2006). As well as a great deal of research literature, reports for government and other agencies, there are many anecdotes and opinion pieces.

The limitations of the available data are summarised below:

- the strong reliance on North American studies, particularly those from the United States. While there is often some congruence between Australia and the United States, there is also a great deal of difference in areas such as the provision of early childhood services, health issues and school systems
- a tendency to group all Indigenous peoples as one. In drawing together evidence to support the readiness of Indigenous children, it is vital to recognise that there is great diversity between, and among, Indigenous groups and children
- it is difficult to compare some data from different states and territories in Australia. For example, reports of preschool attendance patterns often do not discriminate between the types of services available in states and territories, the ages at which children start school, and the qualification and regulations frameworks operating. Current moves to a national quality framework (Commonwealth of Australia 2009b) have the potential to overcome some, if not all, of these differences
- many Australian studies used qualitative methods. While these studies can be very useful in providing rich evidence, they do not provide 'proof' around readiness issues. However, from both ethical and practical perspectives, it is unlikely that large scale randomised control trials will be undertaken into aspects of readiness, such as the benefits of high-quality early childhood education programs, if it is believed that missing out on these programs is likely to have long-term detrimental effects for children
- there are few large scale evaluations of programs, or program types. For example, there is no Australian study which compares to the ongoing National

Institute of Child Health and Human Development studies. The Australian report *The efficacy of early childhood interventions* (Wise et al. 2005) questioned the longer term benefits of a number of well-known early childhood interventions, including many highlighted later in this issues paper:

Long-term benefits (including cost savings) of interventions in early childhood continue to be asserted in broad public debates, despite limited empirical support. More extensive examination of the cost effectiveness, or costs and benefits, of early childhood interventions is needed to substantiate claims of effectiveness (Wise et al. 2005:ix)

- the Longitudinal Study of Australian Children (LSAC) (Gray & Smart 2008) has potential to provide a great deal of information about children's developmental pathways. While Indigenous children are involved in LSAC, it does not include a representative cohort, particularly in terms of geographic distribution. Other studies, such as the Indigenous AEDI (Centre for Community Child Health & the Telethon Institute for Child Health Research 2009), the Western Australian Aboriginal Child Health Survey (Zubrick et al. 2006) and Footprints in Time (FaHCSIA 2009) may help fill this gap
- many intervention programs seem to have attained success at the local level. Scaling up programs for wider implementation runs the risk of losing the factors that make them successful in the first place. Studies of what works do not necessarily translate to examples of practice that will work in every context
- perhaps some of the things that promote ready children, schools, families and communities cannot be measured easily. For example, the cultural appropriateness of communication approaches, 'tone' of classroom interactions or the strengths of Indigenous children in Indigenous knowledge may be difficult to measure.

The limitations of data point to several research gaps:

- there is need for ongoing research within a range of Australian contexts. Many readiness research projects are funded for a 'one-off' investigation of a specific issue or context. There is little research that considers the impact of readiness issues over time or in specific contexts
- mixed methods readiness research is needed that combines the best features of qualitative and quantitative approaches—identifying patterns and trends but also recognising the importance of rich, contextual data in understanding the complexities of readiness



- much current readiness research focuses on one, or maybe two, of its components. Few studies consider readiness in its broadest construction
- in addition to considering readiness as a broad construction, a relatively small number of studies consider different perspectives. The existing research indicates differences among the perspectives of children, families, educators and communities (Dockett & Perry 2007). These differences can mean that people may believe they are working towards the same end, but are actually working at odds
- interdisciplinary research that explores the interaction of health, education, social, cultural and historical factors underpinning readiness is critically lacking
- research that investigates approaches and strategies to recognise and build on the strengths of children, families, communities and educational contexts, as well as seeking to understand the complex interactions of factors associated with risk and resilience, is needed
- there should be independent, ongoing evaluations of programs designed to support readiness at the child, family, community and school level, and of programs that combine these
- it is important to identify appropriate, relevant and meaningful measures of readiness. Such measures can inform conclusions about the effectiveness and accountability of programs
- research on Indigenous children's transition to school, that incorporates critical and Indigenous methodologies (Denzin et al. 2008), should be undertaken in Australian contexts.

In Australia and around the world, there is increasing awareness of the significance of the early years, as a means of improving the experiences and opportunities available to children and as an appropriate investment in the future. This has resulted in major commitment of resources. The research outlined above would provide some local, contextualised evidence to inform this continued commitment and would enhance our capacity as a society to help children make the best start to life possible.

Appendix I: Background to the literature review

One of the purposes of this issues paper was to review the quality and breadth of the available evidence on school readiness, including the health and learning aspects of child development, evaluate the evidence base, and identify any gaps. This paper incorporates research relating to school readiness in general, as well as that specifically relating to Indigenous children, families and communities. It includes studies reported in books, journals and reports as well as web-based material deemed appropriate and relevant.

Two complementary processes were used to determine what has been included in the issues paper. The first process adopted a best evidence synthesis to guide the selection of research to be reviewed (Slavin 1986). The basis of this approach was to determine clear research question/s to be addressed; establish a specific set of criteria for the inclusion of relevant research; outline the processes to be used in its identification; and develop strategies to ensure that a diverse range of research was consulted. The second process, interpretive synthesis (Jensen & Allen 1996), ensured that qualitative—as well as quantitative—research was used to generate a breadth of understandings of the issues under review. These approaches focus on both methodological and conceptual criteria, supporting the inclusion of a wide range of research relevant to the identified issues. The application of these approaches involved:

Determining the research questions to be addressed

The questions around which this paper is framed are:

- what is school readiness?
- what approaches have been used to study school readiness?
- what research evidence links school readiness and the health and learning aspects of early child development?
- what readiness programs and activities have been developed both nationally and internationally?
- what approaches to readiness have been developed in relation to Indigenous children, families and communities?
- what information is available to evaluate these programs and approaches?
- what outcomes are attributed to these programs and approaches?



Establishing the criteria for the inclusion of research

Literature included in the paper was required to meet specific criteria, similar to those adopted by the British Educational Research Association Early Years Special Interest Group (BERA-SIG) (2003). These specify that, for inclusion, research must:

- be relevant to the topic
- have been conducted in a way that minimises bias
- demonstrate external validity
- clearly identify the researcher’s philosophical position
- identify the theoretical positions and analyses used
- appropriately describe the sample size or group involved in the research
- present coherent and logical arguments and conclusions
- utilise a range of relevant evidence to support these arguments and conclusions
- have been published.

Material contained in a range of reports and books, as well as information located on websites, was identified as relevant and important to the review. This material was reviewed using an adaptation of the Clearinghouse’s Assessment Tool prior to inclusion in the report.

Outlining the processes to identify, evaluate and synthesise research

Research and other material were identified through searches of online databases, utilising the library facilities at Charles Sturt University. A variety of search terms was employed, as there is a range of terms used in relation to the year immediately before school (for example, preschool, kindergarten, pre-prep) and the first year of school (for example, kindergarten, prep, reception). Specific search terms are shown in Table A1.

Additional online database searches were conducted using the following terms: ‘ready schools’, ‘readiness programs’, and ‘Indigenous children’. A timeframe of 20 years was used to guide the selection of material, recognising that some of the seminal United States works were published in the 1990s and remain relevant to the current discussion of readiness.

The electronic databases included all the key databases accessible through CSU: PsychINFO; Web of Science; JSTOR; ERIC; EBSCO; Sage; Scopus; Informaworld; and ProQuest. Details of the document types considered in this review are shown in Table A2.

Table A1: Specific search terms

	School readiness	Transition to school	Readiness	Starting school
Combined with:	Indigenous	Indigenous	health	kindergarten
	Aboriginal	Aboriginal	disadvantage	prep
	Torres Strait Islander	Torres Strait Islander	risk	reception
	assessment	assessment	trauma	pre-primary
	family	family	early childhood	pre-school
	community	community		

Table A2: Overview of research/information consulted (n=365)

Document type	Percentage
Book	2.3
Book chapter	8.4
Government report	11.0
Internet resource	2.9
NGO report	9.9
Opinion piece	2.6
Peer reviewed journal	59.1
Policy brief	2.3
Report of practice	1.4
Total	100



Appendix 2: Brief descriptions of readiness programs and activities

Preschool programs

A number of early childhood programs focus on the development of children's readiness. Many of these programs have not been designed specifically to focus on readiness, although enhancing it remains a clear outcome. For example, many of the high-quality programs developed around the world promote children's holistic development, with the aim of improving their lives in the present, as well as preparing them for the future of school. Kamerman (2008), in an overview of the impact of preschool on school readiness, notes consistent positive, long-term results from studies around the world, including Sweden (Andersson 1992), New Zealand (Wylie et al. 2009) and the UK (Melhuish et al. 2008). In addition, evidence from the longitudinal study of the HighScope Perry Preschool program in the US offers compelling evidence of the long-term effectiveness of high-quality early childhood education (Schweinhart 2003). When examining programs and activities to enhance readiness, the role of high-quality early childhood education should not be overlooked (Early et al. 2006; Fiscella & Kitzman 2009; Melhuish et al. 2008; NICHD Early Child Care Research Network 2005). However, access issues for Indigenous children must also be considered.

International programs

California First 5

1998–present

California First 5 is a state-wide approach to promote the health, education and wellbeing of children aged 0–5 and their families. It was established in 1998, through state legislation. The program is funded by a state tax on tobacco. Programs under the auspices of First 5 are delivered by local county commissions who develop strategies based on local priorities and identified needs. Programs are subject to annual internal evaluation.

The approach combines child-focused educational activities with strategies that promote parent-child relationship building (Bates et al. 2006). Included in the program is a component addressing school readiness.

First 5 has adopted a definition of school readiness that incorporates five essential and coordinated elements:

- early care and education
- parenting education and family support services
- health and social services
- schools' readiness for school/school capacity
- program infrastructure, administration, and evaluation.

Sure Start

1998–present

Sure Start is an ambitious United Kingdom government initiative that aims to reduce social exclusion by improving outcomes for families with children under age four from disadvantaged communities by addressing their needs at the local level. The program was launched in 1998 and continues to operate. Sure Start is a community intervention that specifically targets disadvantaged communities rather than at-risk individuals (Melhuish et al. 2007). Sure Start Local Programmes (SSLPs) sought to provide integrated family support, health and early learning services in one location and were centrally funded. In 2003 the United Kingdom Government moved that these early initiatives be transformed into Sure Start Children's Centres (SSCCs). From 2006, these centres have been operated by local authorities. The shift to Sure Start Children's Centres was a move away from specifically targeting disadvantaged communities to providing integrated services in all communities (Katz & valentine 2009). There has been some criticism of the shift from SSLPs to SSCCs, which suggests that mainstreaming services has the potential to diminish the sense of community ownership that existed while the interventions were run as SSLPs. Evaluation of the project had five components: implementation evaluation, impact evaluation, local community context analysis, economic evaluation and support for local evaluations (Katz & valentine 2009). The initial evidence of the benefit of the Sure Start intervention showed very little impact (Rutter 2006). Further evaluations have demonstrated over time that the SSLPs and SSCCs have led to improved outcomes for children and families within the targeted communities.

Smart Start

1993–present

Smart Start is a universal, community-based program in North Carolina that promotes access for families to high-quality child care. It is based on the premise that access to high-quality child care in the early years of life impacts on children's ability at school entry. Many counties in North Carolina have adopted this model to promote children's



learning and development. There is no set curriculum for Smart Start. Rather, communities choose a focus from the three core areas—child care and education; health care and education; and family support and education. The program is not necessarily aimed at children from low-income households, but does not actively target children and families who already have access to high-quality early childhood services. About 25% of the participant families are described as living in poverty.

Evaluations of Smart Start are positive, though confounded by use of different services in different communities. However, after attendance at Smart Start centres, children from low-income families outperformed their non-attending peers at school entry (FPG-UNC Smart Start Evaluation Team 1999; Maxwell et al. 1998). These improvements were sustained through the first year of school. For children who did not live in poverty, there was no significant difference associated with participation in the program.

The Incredible Years

1979–present

The Incredible Years Program is a United States program of parent education. It consists of a core program which addresses parenting skills aimed at supporting children's social competence and reducing problem behaviours (Webster-Stratton et al. 2001). An additional component addresses school readiness (Webster-Stratton & Reid 2004). While the core components have been rigorously evaluated using randomised control trials, evidence of the success of the school readiness component is not as strong. However, a recent randomised control study (Webster-Stratton et al. 2008) links effective use of the Incredible Years Teacher Classroom Management and Child Social and Emotion curriculum (Dinosaur School) with the use of positive classroom management by teachers, and found higher levels of social and emotional competence among participating children—including behavioural self-regulation—than non-participating peers.

Head Start

1965–present

Head Start is a program funded by the US government to provide early childhood education to children living in low-income households and children with disabilities or developmental delays. It has been operating since 1965 as a program for children aged 3 and 4 years. In 1995, the Early Head Start program commenced, targeting children less than 3 years of age. Various program types are funded under Head Start. It combines a focus on education with health and nutrition

programs, and promotes parental involvement (Bradley et al. 2009; Pigott & Israel 2005). A specific focus on readiness was emphasised in the reauthorisation of Head Start in 2005, as the School Readiness Act (Snow 2007). As a consequence, a range of knowledge and skills is expected as children move from Head Start to school. These include the areas of cognition and language, reading, mathematics, social and emotional development, as well as developing English proficiency. The initial evidence connecting Head Start and children's readiness was mixed, possibly relating to the varying quality of its programs and selection bias, with the Head Start population drawn from highly disadvantaged communities. Studies addressing these issues have reported increased academic performance for children attending Head Start, with effects still evident several years after leaving the program (Garces et al. 2002; Lee et al. 1990). The more recent Head Start Impact Study (Love et al. 2005), which evaluated Early Head Start using randomised control trials, has confirmed these effects.

Abecedarian Project

1972–1985

The Abecedarian Project operated in one site in North Carolina, United States, between 1972 and 1985. Its two components were a full-time preschool program, available to children from the age of 6 weeks to school entry, and a school-age intervention over the first 3 years of school. The preschool program was characterised by low child to staff ratios and a curriculum that emphasised children's language development and school readiness. Other components included health and nutrition and access to social work services (Ramey & Ramey 1999). Evaluation of the project, using randomised control trials and longitudinal follow-up, demonstrated that children attending the preschool program, but not the school intervention component, made substantial readiness gains and outperformed a comparison group at ages 8 and 15 (Campbell & Ramey 1995; FPG Child Development Center 1999). Substantial positive effects were still evident at age 21 (Campbell et al. 2002).

HighScope Perry Preschool Program

1962–1967

The HighScope Perry Preschool Program was conducted in Ypsilanti, Michigan, between 1962 and 1967. Participants were preschool African-American children from low-income neighbourhoods, randomly assigned to either control or program groups. The program consisted of centre based sessions, using the HighScope Curriculum (Epstein 2007; Hohmann et al. 2008) and weekly home



visits by classroom teachers aimed at helping mothers implement similar learning approaches in the home. HighScope curriculum is based on developmental theory and promotes children's engagement in active learning. It is not based on a series of defined lessons; rather it involves children and adults working together to plan and extend learning experiences.

The program has been the subject of long-term evaluations (Schweinhart et al. 1993; Schweinhart et al. 2005) with children in both control and program groups being assessed annually from ages 3 to 12, and then at ages 14, 15, 19, 27 and 40 years. Overall assessments have included a wide range of information, such as school records, socioeconomic data, police records and interviews. The extensive, ongoing evaluation has demonstrated the long-term positive effects across educational, socioeconomic, criminal and health outcomes. This study has informed much of the debate about cost-effectiveness of high-quality preschool provision for disadvantaged communities/groups, supporting investment in the early years as a key economic, as well as educational, benefit.

General programs implemented in Australia

These programs may include Indigenous children and families but are not specifically targeted towards them.

Brighter Futures

2003–present

Brighter Futures operates across NSW as a targeted prevention and early intervention program, aimed at vulnerable families with young children who are considered to be at risk of being abused or neglected (Hilferty et al. 2010). The aim of the program is to provide early assistance and support to families who may be struggling with complex problems in order to prevent any intensification of their involvement with the child protection system. Families are invited into the program for a period of two years. It is operated through the NSW Department of Community Services in partnership with 14 different non-government agencies. Brighter Futures began in 2003 and is ongoing. The program is based on a multi-component service model, which aims to provide appropriate service responses that recognise the complexity of the challenges faced by vulnerable families (Hilferty et al. 2010). A number of evaluations of the Brighter Futures program have been conducted, and a final evaluation is due to be released in late 2010. Early findings indicate that the program is improving outcomes for families, although the results vary across different groups.

Smith Family, Let's Read

2003–present

Let's Read is a collaborative project between the Centre for Community Child Health and The Smith Family. It was first developed in 2003 and is ongoing. Let's Read is a nationwide literacy promotion program that aims to train community based professionals, provide relevant and targeted literacy resources to families, as well as support to assist their children to read. Let's Read uses existing services to link up with as many families as possible within the communities in which the program is running. Further information is available at <<http://www.letsread.com.au/pages/index.php>>. A five year ongoing evaluation of the program in five Victorian communities was funded by the Australian Research Council in 2006. Based at the Royal Children's Hospital, it is using a cluster randomized control trial and is ongoing until 2011. Results from this study are not yet available.

Best Start

2001–present

Best Start is an early intervention program funded by the Victorian State Government that aims to support families, caregivers and communities to provide the best environment they can for their children. The program aims to increase access to appropriate services and improve carers' and community capacity to promote the health, development, learning and wellbeing of Victorian children. The program emphasises a coordinated, family-centred service system in local community settings. Evaluation of the project using Owen's typology included five forms of evaluation: development, clarification, improvement, monitoring and impact (Raban et al. 2006). The evaluation concluded that Best Start was successful in meeting all of its objectives and demonstrating considerable improvements in relation to its stated aims.

Families First NSW

1999–present

Families First is a state-wide strategy to improve early intervention services across NSW. The initiative was introduced by the NSW government in 1999. The responsibility for Families First is shared across a number of departments, but the NSW Department of Community Services takes a lead role in its delivery. Families First services are linked in across all levels of delivery, including planning and design as well as implementation at the local level. Families First is based on a number of principles: early intervention and prevention; service integration and networking;



and community outreach and development (Fisher et al. 2006). The range of services offered reflects these principles and includes: family support workers, supported playgroups, home visiting services, school community services and locally developed community programs (NSW Department of Community Services 2004). The Families First Strategy 1999-2003 has been evaluated, using a range of qualitative and quantitative approaches (Fisher et al. 2006). Results indicate positive outcomes in terms of improving processes across the service network, but also indicate that competing demands across the service network pose additional challenges to the planning and delivery of services.

Pathways to Prevention

1999–ongoing

Pathways to Prevention is an early intervention project run as a partnership between Griffith University and Mission Australia. The program is based on a human development perspective which recognises that life does not progress along a linear trajectory. Rather, things change and it is at these points that intervention can help people make links between different contexts (Freiberg et al. 2005). The project was implemented in a suburb of Brisbane in 2002, although it was first conceived in 1999. The setting was chosen because of its social and economic disadvantage and the cultural and linguistic diversity of the community. The initial program focused specifically on children who were making the transition into school and took a whole of community approach by working closely with the community, schools and services in the local area. The two main interventions were a Preschool Intervention Program and a Family Independence Program. By placing equal emphasis on the needs of the child and the needs of the family, the intervention addressed multiple factors that can contribute to negative outcomes for children and families in vulnerable situations. There have been both quantitative and qualitative evaluations of the program and the results show an improvement in behaviour and communication for children as well as a strengthening of families across the community. Importantly, there has been high engagement with the Family Intervention Program, with many families using more than one service (Freiberg et al. 2005). The program continues to run in Brisbane. It has been expanded to include another suburb and now focuses on families with children age 4–12 years. Pathways programs are also run by Mission Australia in New South Wales, Victoria and Western Australia.

HIPPY

1998–present

The Home Interaction Program for Parents and Youngsters (HIPPY) is an international home-based education intervention targeted at vulnerable families with preschool aged children (Dean & Leung 2010). The program uses parenting to enhance a child's learning and does this by fostering the empowerment of both the parents and the children involved. It is introduced in any given community in consultation with local service providers and the community in order to make sure that it meets the particular needs of that community. International evaluation of HIPPY across different cultural settings indicates that the program improves future educational involvement for the parents as well as improved learning outcomes for the child (Dean & Leung 2010). HIPPY programs were introduced in Australia in 1998. In Australia, the program targets are 4–5 year old children, so it follows those children into their first year of school. Ten studies over 9 years, evaluating the effectiveness of HIPPY programs in a number of diverse settings in Australia, have been conducted by Victoria University. The results indicate similar findings to those reported in international studies, with some important additions. The findings in Australia also demonstrate that HIPPY programs can improve the socio-emotional development of children as well as family attachment between parents/carers and their children (Dean & Leung 2010). In 2007, the Federal Government, in partnership with the Brotherhood of Saint Laurence, made a commitment to implement and evaluate HIPPY in 50 communities across the country.

Good Beginnings

1997–present

Good Beginnings is a national charity that operates early childhood intervention services as well as advocacy programs for parents and carers nationwide. All programs are designed around the organisation's five pillars: child focused community development; universal supported groups; volunteer family support; targeted play groups; and intensive family support. Good Beginnings also run a number of Early Years Centres, which are integrated services aimed to operate at the community interface. They use the 'connect approach' in all their programs. This approach is informed by strengths-based practice and advocates that families and communities need to be empowered to make decisions for themselves and that, in order to do this, programs must build on their existing strengths.



Further information is available at <http://www.goodbeginnings.org.au/>. An evaluation of Good Beginnings conducted in 1999 and 2000, using interview data, indicated that the programs were generating positive outcomes for the families and communities involved (Cant 2000). More recent evaluations are not available.

Parents as Teachers

1908s–present (1991–present in Australia)

The Parents as Teachers program originated in Missouri, United States in the 1980s. Its aims are to equip parents with knowledge about child development—including school readiness—and parenting support. The program is delivered by educators trained in the program through home visits, developmental screening of children, parent group meetings, and access to resources and networks. It is designed to be applicable to all families and all communities. The curriculum is age-based, focusing on developmental progression and positive parenting. Evaluations of programs in the United States have mainly used quasi-experimental approaches (Drazen & Haust 1995; Pfannenstiel 1989). These have reported significant positive benefits for the children enrolled. However, randomised control trials have reported limited differences attributable to the program (Wagner et al. 2001). This program has been adopted in many Australian jurisdictions.

Programs for Australian Indigenous children, families and communities

Atitjere Transition to School

2008–2009

This project was based in Atitjere, which is located approximately 250 km from Alice Springs, Northern Territory. It was an action research project led by Lyn Fasoli (Batchelor Institute of Indigenous Tertiary Education) and involved childcare workers from the community. It focused on accessing local knowledge about what was needed to help Atitjere children become ready for school, understanding what the children knew before they started school and identifying what they needed to know in order to be successful at school. Interviews with community and family members provided the data, documenting the children's strengths, knowledge and understandings before they started school. Teachers were also interviewed to provide their

perspectives of children's readiness. Documentation of the project resulted in a booklet to share this information with educators, families and the broader community (Fasoli 2009).

Foundations for Success

2007–present

Foundations for Success: Guidelines for an early learning program in Aboriginal and Torres Strait communities was developed by the Queensland Department of Education, Training and the Arts in 2006–2007. It provides a framework for a Pre-Prep learning program for young children (3½ to 4½ years old) living in 35 rural and remote communities in Queensland; mainly in Cape York and the Torres Strait. The program is designed to enhance Aboriginal and Torres Strait Islander children's continuity of learning and their transition into Prep and Year 1 through the recognition of five key areas of learning:

- being proud and strong
- being a communicator
- being an active participant
- being healthy and safe
- being a learner.

An evaluation of Foundations for Success is currently being undertaken, with a report due to be submitted in late 2010.

Napranum Parents and Learning (PaL) program

2001–present

This program began in Napranum, in far north Queensland in 2001, to enhance collaboration between preschool, school and home. PaL is a two-year home-based program that involves PaL tutors delivering educational kits to parents at home and introducing them to the materials and activities. The kits are designed for children aged 4–6 years. They contain a range of materials to promote literacy and numeracy—including a book, games and activities. The materials recognise that some parents have relatively low levels of English literacy themselves. While many parents speak Kriol or Aboriginal English, the books chosen are in English and parents make the commitment to read to their children in English. Tutors are local community members who undertake the PaL training and are employed by the PaL project. A process evaluation, undertaken in 2003 (Hanrahan 2004), rated the program as highly successful.



Maari Ma

2000–present

This program, operating out of Broken Hill, New South Wales, since mid-2000, adopts a whole of life strategy in its approach to promoting the health, development and wellbeing of children (Kennedy et al. 2009). It brings together a range of inter-disciplinary expertise from the fields of education, health, human and community services. The team has identified a number of focus areas and planned a strategic framework to address these areas in a systematic and coordinated way. The strategy aims to 'optimise the development of Aboriginal children and their families from pregnancy to school entry' in the local area, through the promotion of a population health approach, coordination of a whole of government approach and emphasis on equity and social justice. To date, a detailed set of key indicators for Aboriginal children in the Maari Ma region has been compiled (Kennedy et al. 2009), and this is to be used as baseline data to assess changes in outcomes for Aboriginal children.

We-AI-Li

Early 1990s–present

We-AI-Li is a locally based program operating out of Lismore, NSW. It has operated since the early 1990s and promotes community level change by focusing on the development of an Indigenous workforce to deliver programs targeting children and families and aimed at preventing or managing trauma within the community (Atkinson et al. 2009; Atkinson & Ober 1995). We-AI-Li is delivered through a series of community based workshops; completion of which qualifies participants for a certificate level qualification, with the option of further study and higher qualifications. The program recognises the importance of community involvement in, and commitment to, its focus on community capacity building as well as responsiveness to trauma. While the program has not been formally evaluated, the author notes that:

By establishing and equipping a core group of community members with ten skills necessary to direct vulnerable individuals away from antisocial and unlawful behaviour, substance and alcohol misuse and family violence and neglect, these programs are contributing to the development of safe, structured and stable Indigenous communities (Atkinson et al. 2009:141).

Multifunctional Aboriginal Children's Service

1987–present

Multifunctional Aboriginal Children's Services (MACS) began operation nationally in 1987. MACS are Indigenous focused integrated services that combine child care services, as well as targeted social and development services, that respond to any issues identified by the local Indigenous communities in which they are based. MACS are managed by a committee predominantly made up of Indigenous community members. The majority of MACS centre staff are Indigenous. MACS are widely considered to be a best practice model of a successful Indigenous early years program. They were originally funded by the Department of Family and Community Services and exist in a number of communities nationwide. In 2010, MACS services were funded by the Department of Education Employment and Work Relations (DEEWR) and supported by state-based Indigenous Professional Support Units. DEEWR has significantly increased funding to MACS and is currently conducting an audit of its implementation and management, which is due to be released in late 2010.



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Terminology

Indigenous: Aboriginal and Torres Strait Islander and Indigenous are used interchangeably to refer to Australian Aboriginal and/or Torres Strait Islander peoples. The Closing the Gap Clearinghouse uses the term 'Indigenous Australians' to refer to Australia's first people.

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