
Mothers as first teachers: exploring the features of mother- child interactions that support young Aboriginal children's multilingual learning at playgroup

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Families as First Teachers Playgroups

Abstract: For many Indigenous children living in remote communities, the prerequisites to achieving strong language and learning outcomes include the maintenance of their first languages and progress in learning English as an additional language. This paper reports on data from a Linkage study conducted with families at two Families as First Teachers (FaFT) playgroups in two remote Northern Territory communities. The data highlight the ways parents and carers encouraged very young children to engage in home languages as a foundation on which to develop skills in English during play and book reading activities. Transcripts of mother-child book reading and play sessions and reflections of FaFT Family Liaison Officers are examined to explore the language interactions and the strategies used by mothers to support children's multilingual learning. The data highlight the importance of early childhood teaching and learning that honours children's linguistic and cultural resources and prioritises families' aspirations for children's multilingual language learning.

Key words: *bilingual learning, multilingual and multimodal learning, Aboriginal languages, gesture, sign language*

Introduction

This study was nested within a larger three-year Australian Research Council (ARC) Linkage Project (2015-2017) entitled “Building a Bridge into Preschool in Remote Indigenous Communities” (see Page et al., 2019). First, the Linkage project evaluated the impact of the Abecedarian Approach Australia (3a) teaching and learning strategies that are implemented at Families as First Teachers (FaFT) playgroups on young Aboriginal children’s learning and overall development prior to attending preschool. Second, the project explored the aspirations of families and community members for their children’s learning and education. This included reflecting on whether first languages and cultural knowledge aligned with the 3a teaching and learning activities at FaFT playgroups and could be embedded into daily 3a activities to support young Aboriginal children’s language, learning and cultural knowledges and skills prior to attending preschool. Underpinning this research was recognition and appreciation of Indigenous peoples’ right to use and develop their languages over the generations as per *Article 13* of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2008).

Key principles and priorities for multiple language use guided the design and development of the study. These priorities included the maintenance of a child’s first/home language/s as an essential part of developing a child’s sense of identity and promoting language and cognition (Cummins, 2001), and the ongoing development of children’s first language and progress in learning English as an additional language, as a pre-requisite to bilingual children achieving the five learning outcomes outlined in the national Early Years Learning Framework (Australian Government Department of Education, Employment and Workplace Relations [DEEWR], 2009). At the outset of the project, the research team outlined a series of guiding principles intended to link the educational platform at FaFT – the Abecedarian Approach Australia (3a) – with local Indigenous strengths and cultural realities so that both the strength of the culture and proven school-preparation effectiveness were retained and strengthened. The intention was to nurture a *multilingual ecology* by fostering multilingual learning within FaFT playgroups that offer families rich opportunities to use their languages and

encourage linguistic diversity (Victorian Curriculum and Assessment Authority [VCAA], 2020).

Background

The FaFT playgroups were rolled out across the Northern Territory from 2009 with the dual aims to build the confidence of Aboriginal parents as their children's first teachers and to improve developmental outcomes for young Aboriginal children through access to and engagement in high quality, evidence-informed educational programs (Gonski et al., 2018). After community consultation and engagement, the Abecedarian Approach Australia (3a) strategies were chosen as the educational platform at FaFT playgroups as they had a strong, longstanding evidence base which demonstrated positive impacts for young children from early in life (Cook & Piers-Blundell, 2019). Abecedarian studies undertaken in the US highlighted a number of positive effects on young children's learning and overall development - cognitive, language, social, and emotional skills - early in life that persisted into school and adulthood (Campbell et al., 2012; Sparling et al., 2021). The determining features of the positive impact were that the children engaged in individual, intentional, frequent, language-rich interactions with adults (Sparling & Meunier, 2019) in early childhood programs and in the home learning environment where parents were coached in the Abecedarian strategies.

The original Abecedarian Approach consists of four interconnected elements - Language Priority, Conversational Reading, LearningGames® and Enriched Caregiving. The active ingredients underlying these elements include rich language interactions, joint attention, back and forth exchanges between the adult and the child, and emotional support for the child. Each element is incorporated into the child's day multiple times, with repetition providing many opportunities for practice (Sparling & Meunier, 2019). Many of the interactions are one-on-one, allowing adults to tailor specific strategies and responses to each child's individual needs and interests. Language Priority involves incorporating rich language experiences throughout ordinary events of the child's day, providing children with plentiful opportunities for listening, talking, responding, and turn-taking. Conversational Reading involves the adult engaging children in individual, repetitive, language-rich book reading interactions, with an emphasis on back-and-forth and reciprocal exchanges to

build young children's joint attention, comprehension, and receptive and expressive language skills. Enriched Caregiving involves adults advancing children's language and cognitive skills by emphasizing the social/emotional aspect of common care routines and incorporating explicit educational content; for example, by using parallel talk or by talking about textures and colours while getting dressed. LearningGames[®] are a suite of learning experiences that involve adult-child exchanges to support specific learning goals with an emphasis on language, cognition and principles underlying the *3a* approach.

The original Abecedarian strategies were adapted by the Northern Territory government in consultation with several communities in the Northern Territory. The Northern Territory Government's Indigenous Early Childhood Parenting Reference group and the original developer of the Abecedarian Approach, Professor Joseph Sparling were consulted throughout this process to ensure cultural relevance and local fidelity across diverse community contexts. The approach was renamed the Abecedarian Approach Australia (*3a*) – and was adopted as the educational program implemented at FaFT playgroups across the Territory. Importantly, the *3a* teaching strategies are portable and adaptable, enabling the learning to be delivered in first language/s and English and to be tailored to specific contexts (Gapany et al., 2021). Concurrent with several studies exploring the potential of Abecedarian strategies to promote positive outcomes for young Aboriginal children (Brookes & Tayler, 2016; D'Souza, 2016), this study was part of a broader program (Page et al., 2019) that sought to contribute to the developing evidence base on the use of the *3a* strategies in Australian educational contexts.

The *3a* strategies were implemented at daily FaFT playgroup sessions, during home visits and in transition-to-preschool programs in each community. Mothers and family members attended the playgroups with children for the full duration of the sessions. FaFT staff including a Family Liaison Officer – a local Aboriginal person with expertise and experience in early childhood education – and a Family Educator – an accredited early childhood teacher, worked together in local implementation teams to ensure cultural competence in the delivery of the evidence-based educational program (*3a*). Training was provided to support the FaFT teams to build strong knowledge of the research and theory underlying the *3a* teaching strategies and to build their capacity as coaches. The training involved completing three days of certified

3a Practitioner Training and one day of certified Coach Training with the research team. Through the provision of daily coaching at FaFT playgroup sessions, FaFT staff were then able to provide coaching for mothers in the use of 3a strategies in first languages/s and explore how cultural knowledges could be embedded further in evidence-based teaching strategies, both at playgroup and in children's home environment (Page et al., forthcoming).

Literature review

The research evidence on the effectiveness of bilingual education is well documented, with a vast number of international studies confirming the positive effects on children's linguistic and educational development (Adesope et al., 2010). Case studies of schools and classrooms confirm the benefits of promoting strong first language learning for supporting majority language development, and reveal that bilingual education positively supports children's identity construction and their feelings of cultural and linguistic self-worth (Molyneux et al., 2015). More specifically, when we consider the language learning of very young children, bilingualism and multilingualism are both common and natural, as young children readily acquire and differentiate multiple languages spontaneously, simultaneously or sequentially (Filipi, 2015; VCAA, 2020).

Bilingual education for Indigenous learners was first introduced in the Northern Territory in 1973 (Devlin, 2009), with the implementation since this time described by Oldfield and Lo Bianco as "highly politicised and continually disrupted" (2019, p. 175). Yet these authors also point to a more positive future and the growing global acceptance of multilingualism and the recent expansion of Indigenous language programs, both in and out of school settings. Support for bilingual education is also reflected in ongoing and wider community support for the teaching and speaking of Indigenous languages with it rated as either "important", "very important" or "totally important" by most (89%) of the 18 Indigenous parents who participated in a questionnaire study conducted across four Australian states (Windisch et al., 2003). Similarly, a Victorian Elder in another study expressed her wish to see both English and local Indigenous languages used side by side in early childhood spaces, such as reading the same story in both English and an Indigenous language so that children stay connected to their cultural language and keep up with what is required at school, becoming "two way

strong” (Lopez, 2008).

There are now strong illustrative examples of bilingual and multilingual practices in Indigenous early childhood education and care contexts. Shrinkfield and Henry (2019) report on a family Story Time program that evolved over twenty years across the Ngaanyatjarra communities in Western Australia. Reading and talking about books together in children’s home language, in an early years program in the company of families across the community, has helped to maintain the family and home language environment of the child as “young parents are bringing up their children in the strong family, linguistic and community context of their culture” (Shrinkfield & Henry, 2019, p. 83). Disbray’s (2008) study in Tennant Creek, Northern Territory, describes how caregivers and children were code-switching between Warumungu (traditional language) and Wumpurrarni English (a new variety of Aboriginal English) during their book reading sessions. The use of Warumungu language elements, including possession or location-marking suffixes and nouns in Wumpurrarni English, were considered important to foster children’s interest in the story. Gapany et al. (2021) highlight that teaching cultural knowledge and languages early in life builds young Aboriginal children’s cultural identities and empowers mothers as their children’s first teachers. Early childhood programs such as these are recommended to support Indigenous children in developing their language skills while embracing their cultural identities (Disbray et al., 2018; Secretariat of National Aboriginal and Islander Child Care [SNAICC], 2012).

In many parts of Australia, gestures are frequently used in day-to-day communication, and this adds to the rich linguistic environments of Indigenous communities where individuals communicate using sophisticated multilingual and multi-modal language/s (Oliver & Forrest, 2021; Wigglesworth et al., 2011). In Central and Northern Australia and the Western Desert regions sign languages are employed alongside speech, but also at times as an alternative means of expressing nuance, humour and the specificity of aspects within Aboriginal communities (Ellis et al., 2019). In remote Central Australia, non-verbal interactions have been observed to engage and encourage children to communicate, verbally and in sign, from a very young age. Adone and Mayilama’s study (2014) details ways that adults in Arnhem Land use sign language when teaching children about Country, such as fishing at the beach, hunting in the bush and understanding the sites of

ancestral significance. In Yolŋu communities, children learn to sign at an early age as “language and gestures play a more significant part in the early development of language, than verbal language” (Gapany et al., 2021, p. 5).

Language programs can also foster collaboration between schools and the communities they serve (Molyneux et al., 2016). The linking of Local Languages to the language of instruction becomes particularly important where the Local Language has key roles in identity formation and communication and where English is not spoken in the home (Grimes, 2009). Cummins (2017) states that bilingual approaches “challenge historical and current patterns of societal power relations that devalue, disparage, and exclude from schooling the language and cultural accomplishments and practices of minoritized communities” (p. 405). As our intention in this study was to “build a bridge” and empower local communities, the use of first/home language/s critical to building relationships with families and central to the success of the study. From the project outset we recognised the importance of researchers and parents walking side by side to build on the knowledge and strength of local families. The rich cultural understandings, languages, concepts and skills that Aboriginal families and children engage in at home and in the community were central elements of the playgroup program while Indigenous peoples’ knowledges, experiences and interests were at the core of this research (Page et al., forthcoming).

This paper reports on observations of mother-child book reading and play sessions during FaFT playgroups. Each of the adult participants in this study were the mothers of the children, and while we recognise they are unique individuals with their own parenting preferences, we at times reference ‘the mothers’ more generally. We also interchange ‘mothers’ with parent, parents, and caregivers to respectfully acknowledge all those who support young children’s language learning. The research builds on the extant literature by exploring mothers’ and children’s language use and the features of the language interactions that support young Indigenous children’s multilingual language use from the earliest stages of learning.

Methodology

Sites and participants

Two remote communities in the Arnhem Land, Northern Territory were the study sites for this research. These communities

had been implementing the 3a educational program in FaFT playgroups for three years and had recorded high levels of child and family attendance when the study commenced. Daily playgroup sessions were held on five mornings per week at Site 1 and four mornings per week at Site 2 increasing to five days a week in the last 12 months of the study. At Site 1, there are approximately 3,000 people who speak a range of English Languages, including Standard Australian English and Aboriginal English, and 13 different Local Languages including Ndjebbana, Burarra, Djinang, Eastern Kunwinjku, Gunnartpa, Gupapuyngu, Gurrgoni, Kunbarlang, Nakkara, Rembarrnga, Wurlaki and Kriol. At Site 2 there are approximately 2,500 people who primarily speak various English Languages and Yolŋu Matha (Djambarpuyngu) in their everyday interactions. From the larger ARC data set, (i.e. participation and outcome data collected for 149 children and families during the 3-year ARC study, Page et al., 2019), a smaller sample of mothers and the youngest children from the two research sites agreed to participate in this sub-study of free play and book reading observations to explore how mothers supported children's language learning. In total 20 mother-child dyads participated in this sub-study, with matched free play and book reading videos available for 15 dyads. The data for these 15 dyads are included in the analysis below. The age of the children ranged from 8-16 months old at Site 1 and 12-15 months old at Site 2. University ethics and Institutional approval was obtained from the relevant committees of the two partner organisations. Informed written consent to participate in this study was obtained from a parent or family guardian with the assistance of an Aboriginal staff member at the FaFT program.

Data collection and analysis

Video recorded observations of mothers and children participating in free play and book reading activities were collected. The English language books, and toys used in this study were chosen and reviewed by families attending FaFT in consultation with FaFT staff members and the research team. Some books were familiar books that children enjoyed at FaFT and others were chosen for their engaging illustrations. The mothers drew on their experiences at FaFT playgroup sessions of translating the English words in these texts into their children's first languages. The toys included two soft cuddly animals, two crocodiles, six coloured blocks, a car and a boat. The picture books included Baby 123

(Priddy, 2004), Three Little Pigs (Davidson, 2012), Diary of a Wombat (Fox & Whatley, 2007), Helping Little Star (Morgan & Kwaymullina, 2013), Possum Magic (Fox & Vivas, 1983) and Growl Like a Tiger (Lester, 2012).

The instructions below were provided by the Family Liaison Officer at each FaFT playgroup to help guide the mothers' interactions during the free play/book reading sessions:

We are studying how mums and children play/read books together at various ages. Here are some toys/books you may use. We will leave the camera on for about 10 minutes and we will just sit here quietly while you play/read. Enjoy this time with your child.

A summary of participant characteristics and the 30 video recordings is provided in Table 1.

Table 1. Mother-child book reading and play interactions

Dyad	Site	Child age	Child gender	Book reading episode number	Play episode number
Dyad 1	Site 1	1 year 2 months	F	1	16
Dyad 2	Site 1	8 months	M	2	17
Dyad 3	Site 1	1 year 1 month	M	3	18
Dyad 4	Site 1	1 year	F	4	19
Dyad 5	Site 1	1 year	M	5	20
Dyad 6	Site 1	1 year 2 months (play) 1 year 4 months (reading)	F	6	21
Dyad 7	Site 1	1 year 2 months	M	7	22
Dyad 8	Site 1	1 year 4 months	M	8	23
Dyad 9	Site 1	1 year 3 months	M	9	24
Dyad 10	Site 1	1 year 1 month	M	10	25
Dyad 11	Site 1	1 year 4 months	M	11	26
Dyad 12	Site 1	1 year 1 month	M	12	27
Dyad 13	Site 2	1 year 1 month	M	13	28
Dyad 14	Site 2	1 year 3 months	F	14	29
Dyad 15	Site 2	1 year 2 months	M	15	30

Video recording commenced when participants felt comfortable and was paused/stopped when requested by participants or when the Research Assistant and Family Liaison Officer determined that stopping was necessary. Each interaction session was recorded for approximately ten minutes and accompanied with a video recorded debrief session, between the Family Liaison Officer and Research Assistant of approximately five minutes. In the debriefing sessions, the Family Liaison Officer and Research Assistant provided an interpretation and commentary on play and book reading sessions in English, which supported a culturally responsive data analysis process.

The transcribing of the debrief sessions was the first step in the analysis process with the debrief transcripts labelled for translations and behavioural interpretations. At this time translations were checked with the Family Liaison Officer and Research Assistant for verification. The interaction videos were then viewed in conjunction with the corresponding debrief videos and codes and categories were developed for both the mothers and children with these detailed below. Any audible sound created by voice was coded as ‘Talk – Verbal’. An instance for ‘Talk – Verbal’ was created whenever the voice heard was followed by a pause indicating the speaker’s turn was over (Freebody, 2003). Sign language, gestures and facial expressions were coded as ‘Talk – Non-verbal’.

Table 2. Interaction codes

Mother	Child
Mother_Gaze_Child	Child_Gaze_Mother
Mother_Gaze_Toy/Book	Child_Gaze_Toy/Book
Mother_Talk_Verbal	Child_Talk_Verbal
Mother_Talk_Non-verbal	Child_Talk_Non-verbal
Mother_Touch_Toy-Book	Child_Touch_Toy-Book
Mother_Touch_Child	Child_Touch_Mother
Mother_Position_Sitting	Child_Position_Sitting
Mother_Position_Moving	Child_Position_Moving

Each book reading and play video was then coded using the licensed software package Studiocode® for the entire duration of each video. Each coded video was then viewed as a timeline showing simultaneous and subsequent behaviours between mother and child. In each of the coded timelines, the most densely coded segments were selected as indicative of the occurrence of highly engaging interactions between the mother-child pair. While the occurrence and length of these engaging episodes differ in each video, approximately one minute from each video was selected for transcription and further descriptive coding. The interactions selected for this paper highlight moments of language use, both verbal and non-verbal, between the mother and child pairs. Specifically, we were looking for examples of the language used to show evidence of the opportunities the mothers provided to foster young children's bi and multilingualism, defined for this study by Disbray and colleagues (2018, p.1) as "the ability to express oneself in two or more languages for the purposes the speaker has for each language". The episodes below are selected as illustrative examples of four specific categories: (1) mothers' use of Local Language/s, (2) mothers' use of English Languages, (3) mothers' use of Local Languages and English Languages and (4) children's language use.

To assist with reading the transcripts please note, all words with unverified spellings are underlined, untranslated Local Language is round bracketed (Local Language), and translations for Local Languages and sign language are square bracketed e.g., butjiy [dog]. Local Language is capitalized to acknowledge and respect specific Local Languages. The name of the Local Language is round bracketed if known. English is used in the transcripts and descriptions to represent the plurality of English Languages used by the participants. Where children's names were mentioned, they have been replaced by [child's name].

Results

1. Mothers' use of Local Language/s

The following examples demonstrate the mothers' use of Local Language/s to engage their children in book reading and play interactions. The mothers supported their children's understanding, following their child's gaze, and using touch, sign, and gestures they labelled pictures in text and objects using Local Languages. Common expressions in Local Languages were also frequent in the interactions.

Dyad 11, Book reading episode 11

The child was sitting on the mother's lap and looking at the pictures in the book they were holding together. The mother checked the child's gaze and said "Butjiy [dog]" while tapping his hand on the puppy twice, once for each syllable. The child pointed to the three puppies in front of him one by one while saying "A-da-da". Following the child's actions and attention, the mother repeated "Butjiy butjiy [dog dog]".

Following the child's gaze, the mother labelled the pictures in the text using Local Language (Djinang), touch, gesture, and synchronized verbalization to maintain the child's attention. The mother supported the child's awareness of language by emphasizing the syllables of the word and reinforced the language used through repetition.

Dyad 6, Play episode 21

The mother and child were sitting facing each other with a box of toys placed between them. The mother put the boat in an upright position and asked the child "Marthangay [boat] wanha [where] marthangay [boat]?" while using the "where" hand gesture. The child was looking at the toys. The mother pushed the other toys away, pointed to the boat and asked the question again with the same hand gesture. The child picked up the boat and said "Right". The mother clapped and said "Hooray, right".

The mother used Local Language (Yolŋu Matha) and the sign for "where" to support the child's location of the targeted toy, positioning this so that it was easily seen by the child. The child identified the toy and sought confirmation. The mother celebrated the child's achievement and repeated the child's verbal response to reinforce the child's success.

2. Mothers' use of English Languages

English Languages were frequently used in the book reading episodes, following the language of the text, and when counting and teaching concepts such as colour. Similar to when Local Languages were used, sign and gesture accompanied the mothers' verbal responses.

Dyad 12, Book reading episode 12

The child and the mother were sitting next to each other. The mother moved the book to the child's eye level. The child pointed to the page. The mother pointed to two babies while saying "One, two baby awa". The child continued pointing to pictures. The child finished pointing and looked at the mother. She nodded and smiled at him.

Reading the book, the mother labelled the pictures and modelled counting and one-to-one correspondence for the child using English. ‘Awa’ is a word used to attract attention and encourage a verbal response. The mother acknowledged the child’s efforts to point to the pictures and continued to read the book to the child.

Dyad 15, Book reading episode 15

The child was sitting on the mother’s lap and looking at the pictures in the book they were holding together. The mother turned the page, pointed to the lion and the tiger while naming them “Lion ga [and] tiger”. The child looked at the lion, then the tiger, then the lion again and made a roaring noise.

The mother was supporting the child to identify each of the pictures, pointing to and labelling these in English. The child showed his understanding of the animal pictures by verbalising the sounds matched to the animals.

Dyad 2, Play episode 17

The child was sitting next to the mother with four blocks of different colours in a row in front of the child. The mother asked “Yellow where?” while gesturing “where”. The child pointed to the red block and the mother said “Red one”. The mother said, “Blue block here” while gesturing and pointing to the blue block. The child pointed to and reached for the blue block.

In this episode the mother asked the child to identify the coloured blocks, using the sign for “where” and naming the colours in turn to assist the child to locate the different coloured blocks. English and gesture were used throughout this exchange.

3. Mothers’ use of Local Languages and English Languages

The mothers often used both Local Language/s and English Languages in the book reading and play episodes, frequently moving between languages to engage children in these learning activities. The excerpts below are illustrative of the languages used in the episodes observed.

Dyad 3, Play episode 18a

The mother and the child were sitting facing each other with the toys placed between them. The mother took the big crocodile from the box, said “Marrchila [crocodile], big one. Aiya, big one” and put it on the mat. She said “Little one”, as she asked the child to look at the small crocodile in Local Language and put the small crocodile next to the

big crocodile...The mother pointed at the big crocodile and said “Bäru [crocodile] ah-ah”...The mother picked up the big crocodile and role-played the crocodile biting the child “Ahm”. The mother grabbed the child’s arm, called the child’s name, made a biting sound “Ahm” again and asked the child to look at the crocodile in Local Language. The child saw the crocodile and screamed “Ahhh-ahhh” while kicking his legs to escape.

In this role play using toy crocodiles, two Local Languages, Burarra “*marrchila*” and Yolŋu Matha “*bäru*” were used to name the crocodile, with English used to support the child’s understanding of size, little and big, “*Aiya*” is a word commonly used by mothers at Site 1 to express delight. The child showed his awareness of the crocodile as a dangerous animal as he expressed his fear and moved to avoid it.

Dyad 3, Play episode 18b

The child and the mother were sitting next to each other facing the toys. The child lay down facing the mother. The mother called the child’s name while putting another soft toy on the mat next to him. The child pulled one of the soft toys towards himself. The mother touched the toy that he was holding and said “Baby gong gong [sleeping] (Local Language) [child’s name], gong gong” ... The mother held the child’s hand with the soft toy up, pointed towards the sky and said “Moon, mo-on, mo-on”.

The mother seized the opportunity to engage in pretend play, using the soft toys as the child’s sleeping companions as the child lay on the mat and using both Local Language, English and gestures to name the actions and objects for the child, connecting sleep to the imagined sighting of the moon.

Summary for mothers’ language use

While the episodes above have been selected as examples of the specific categories of mothers’ language use, singular or mono forms of language use were rare. Local Languages, English, sign and gestural language were used interchangeably throughout the interactions, illustrative of the multimodal language practices at each site. The findings suggest each of the adults used English when the object, descriptor or action referred to were borrowed from the printed texts. For instance, English was used for animals outside of the communities and to teach colour and numeracy

concepts. Local Language/s were used to engage and direct the child's attention, and to name familiar animals, objects, routines and events. For example, most references to crocodiles were in Local Language as they are commonly found in the surrounding waters. Sign and gesture accompanied speech with this central to the parents' communicative repertoires (Ellis et al., 2019; Gapany et al., 2021).

4. Children's language use

The excerpts above provide evidence of the multilingual environments and the receptive language skills of the young children in this study. The examples below highlight children's developing expressive bilingual language skills as captured in the book reading and play episodes.

Dyad 14, Book reading episode 14

The child was sitting on the mother's lap and looking at the pictures in the book they were holding together. The child closed the book and reopened it to the page with the bird picture. The mother said "Warakan [bird], warakan [bird], bird". The child reopened the book and said "Wäwa [brother]". The mother said "Ya wä-, ah wäwa". The child continued to say "Wäwa" each time she opened or closed the book. The mother said "Wäwa" quietly and then repeated "Wäwa" a few times.

The mother supported the child to take the lead in the activity as she handed the book to the child and extended the child's language by naming the picture in both Local Language (Yolŋu Matha) and English. The mother acknowledged and repeated the child's use of Local Language (Yolŋu Matha) word for "brother" and continued to verbalize this kin term reinforcing the child's learning.

Dyad 7, Play episode 22

The child was sitting on the mother's lap and the mother was looking at the child's face. The child looked at the baby mouse and said "Ngian ngian, ngian ngian [cutie]". The mother said "Where you are?". The child said "Ngian ngian" again. The child held the baby mouse close to his mouth and talked to it "Ngian ngian". The mother said "Where you are?" again and the child said "Ngian ngian" in reply. He put the baby mouse next to his ear and said "Hello". The mother said "Hello, hello" and laughed.

The child used Local Language to describe the toy mouse with the mother's questioning prompting a verbal response. The child first held the baby mouse close to his mouth and talked to it before placing the mouse near his ear, to represent a phone as is common in symbolic play and said 'hello'. The mother was delighted and imitated the child's verbal expression saying 'hello' in return.

Summary for children's language use

The children used verbal language throughout the free play and book readings sessions to describe and name objects in the books and toys in their immediate environment. Most often the children used Local Language/s, when describing familiar objects and when referring to family members. English was used as a form of greeting and for confirmation. While many of the utterances were child-initiated, and repeated by the mothers, others were prompted by the mother or an imitation of the adult's speech.

Discussion

Analysis of the language transcripts reveals that mothers' language interactions with children incorporate a range of strategies and features that foster young children's multilingualism and cultural pluralism. As argued by Sims et al., (2017), the ability to use multiple languages in a single conversation represents a collection of communication strengths upon which mothers and children can draw to suit any purpose and which supports their overall communication capacity. Paris (2012) shares this strength-based view of multilingualism, arguing that culturally sustaining pedagogies must foster both linguistic and cultural pluralism as part of the democratic project of schooling in a multiethnic and multilingual society. Strategies used by parents and caregivers at FaFT playgroups to foster young children's bilingualism and maintenance of culture include scaffolding children's expressive and receptive language using code-switching, translation and gesture, and the authentic engagement of children through the integration of Local Language, culture, and identity. These strategies are discussed in more detail below.

The mothers were adept at moving between languages and making language choices to effectively communicate with their young children, demonstrating their linguistic dexterity (Paris, 2009). This reflects the diverse range of languages used in the two communities where speaking multiple languages is an expectation

with bilingualism embraced as important in sustaining “both ways” education (Lee, 2019). While parents’ motivations for specific language choices are unknown, we see some patterns in the selection and use of languages. Local Languages were used to gain the child’s attention (dyad 12, episode 12), give instructions (dyad 6, episode 21) and to name and label objects in the environment (dyad 14, episode 14) with English also used for labelling and instructing and to teach colour and numeracy concepts (dyad 2, episode 17 & dyad 12, episode 12). Verbal encouragement in English from mothers, in the form of playful questioning (dyad 7, episode 22), repetition (dyad 14, episode 14), acknowledgement and celebration (dyad 6, episode 21) further reinforced children’s efforts and consolidated their understanding.

Throughout the interactions, we see the participants code-switching, alternating the use of two or more “named languages” at their discretion while maintaining meaningful speech interactions (Gumperz, 1972; Poplack, 1980). Similar to Bail and colleagues’ study (2015) of bilingual caregivers and young children aged 18 to 24 months, this included inter-sentential code-switching, generally comprised of long strings of words in each language and intra-sentential code-switching, primarily words in one language, with only one or a few words in the other language. Both within sentence code-switching (dyad 3, episode 18a & dyad 15, episode 15) and between sentence code-switching (dyad 6, episode 21) were evident in the mother-child interactions.

The parents’ use of translation to facilitate children’s vocabulary learning of multiple languages was also evident in both the book reading and play interactions. Translation provided children with the language they were familiar with while simultaneously introducing an additional language that they were encouraged to learn. For example, in dyad 3 (episode 18a), the mother called the crocodile “*marrchila*” (Burarra) then “*bäru*” (Yolŋu Matha) and the mother used Local Language and English to label the bird when book reading (dyad 14, episode 14). Research shows that translation practices involving the learning of two different language words possessing the same meaning can facilitate children’s appropriation of linguistic and metalinguistic skills (Kultti & Pramling, 2017).

The mothers in this study were able to shift between a variety of languages, modes and registers according to their intended purposes, manipulating language in seemingly effortless ways to develop children’s dual language comprehension and

expressive language skills (Alim, 2005). This occurred alongside the use of gestural and sign languages to extend their children's multimodal communication skills. In both the book reading and play interactions, the mothers provided scaffolding for children's language learning through the physical positioning of toys or pictures, and the simultaneous use of pointing and gesture. For example, the mother used pointing gestures to direct the child's gaze to the sky and to engage the child in imaginary play, supporting the child's understanding of "moon" (dyad 3, episode 18b). In addition to deictic gestures, mothers used a range of representational gestures to foster children's engagement and understanding and to support their language learning. Representational gestures included gestures resembling actions performed by or in relation to the referent as well as conventional gestures such as shaking the head (Volterra et al., 2005). For example, mothers and children made gestures resembling actions of crocodiles eating (dyad 3, episode 18a). The use of representational gestures, as part of embodied meaning making, supports young children to not only make meaning and understand themselves but also to empathise with and communicate meaning to others (Dunn & Wright, 2015). Both parents and children were highly engaged as they imitated each other in these gestural interactions during the book reading and play sessions.

The study provides evidence of the parents' concurrent use of sign language alongside gesture to communicate with their young children and scaffold language learning. In Yolŋu communities, sign and gesture are considered together as *djama gongdhu*, which means "work with hands" (Adone & Maypilama, 2014, p.102) and these two modes of communication are not regarded as "distinct categories" (Kendon, 2008). In the communities engaged in this study, gestures and signs are taught from birth and introduced over time and include kinship signs and those used for bush food and local animals (Gapany et al., 2021). Specific signs observed included pointing gestures, as mothers pointed with their eyes and hands (dyad 2, episode 17), also asking "where" as the mother positioned the toy in clear view of the child to capture their attention and used gestural actions to support their child to correctly identify the toy boat (dyad 6, episode 21). The mothers and children's use of sign practices and gestures contributes to building a broader repertoire of responses for children to express their knowledge and understanding (Gapany et al., 2021).

Conclusion

Consistent with findings from the wider study in which this project is nested, this study provides support for the use of culturally responsive, language-rich teaching strategies shared between adults and children, in early educational programs (Page et al., 2019). By demonstrating how adult caregivers were able to draw on multiple spoken and gestural languages, this study highlights the strengths and language dexterity of mothers, and adds to the evidence demonstrating the importance of parental participation in culturally competent early learning programs that are responsive to local context, culture, priorities, and strengths, and that build upon the expertise and knowledges of communities (Australian Institute of Health and Welfare, 2013). The study also provides support for policy initiatives that acknowledge the role of home languages in children's early learning and the contribution they make to identity formation and engagement, as well as providing educational value in terms of children's bilingual language acquisition (Northern Territory Government, 2017; Wilson, 2014). Policy initiatives and practical measures that aim to support young Aboriginal children's language outcomes in the future should build on the evidence demonstrating the importance of language-rich, parent-child interactions, while considering the aspirations, strengths and knowledges of families, and the unique language and cultural traditions in remote communities.

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