

REPORT TWO



Codesigning with remote communities in response to complex social challenges



Goodstart Early Learning acknowledges all Traditional Custodians across Australia and recognises First Nations peoples' continued cultural and spiritual connection to the land, sky and waterways that surround us. We pay our respects to Elders past, present and emerging.



**We thank everyone who participated in this work.
Through this, we have learnt together.**



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The Paul Ramsay Foundation's purpose is to help end cycles of disadvantage in Australia by enabling equitable opportunity for people and communities to thrive. This project was funded by the Paul Ramsay Foundation. Any opinions, findings, or conclusions expressed in this report are those of the author(s) and do not necessarily reflect the views of the Foundation. The Foundation would like to thank its partners who were involved in this work for their contributions.

Aboriginal and Torres Strait Islander people should be aware that this report may contain images and names of deceased persons.

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Definitions

Human-centred design

Human-centred design (HCD) is an approach to problem-solving that puts people at the heart of the design process. HCD is an iterative practice that prioritises continuous feedback to address specific requirements, needs or challenges of the people the design is for, as a solution evolves.

Codesign

Codesign is a collaborative design methodology that emphasises ‘designing with, not for, people’. This small shift in preposition signals the efforts to sharing power and decision-making, elevating the voices and contributions of people with lived experience. Codesign uses inclusive facilitation that welcomes and works with many ways of knowing, being and doing.

Participatory design

Participatory design facilitates the direct involvement of people in the design of the products and services they use, aimed at making technologies, tools, environments, businesses, and social institutions more responsive to human needs.

Decolonising design

Decolonising design is a practice that acknowledges colonial impacts on diverse, indigenous communities. Decolonising design seeks to amplify these voices, values, and beliefs through their frame of reference and collaborative and place-based approaches rather than commercial and modernising aims.

Yarning

Yarning is a traditional conversational practice and sharing of knowledge, information, wisdom and traditions. It involves storytelling, deep listening and respectful dialogue which strengthens community connections and builds respectful relationships.

Introduction

In 2022, Goodstart Early Learning (Goodstart) embarked on a project to consider the question:

How might we address disproportionate developmental vulnerability for remote children by codesigning sustainable, scalable, high-quality education and care offerings that advance education within Australia?



This report provides a detailed analysis and critical reflection of two different codesign approaches we employed to engage with two remote communities. In Stream 1 we immersed ourselves in community, drawing on decolonising participatory codesign to foster community ownership of local change aimed at helping First Nations children grow up strong. In Stream 2, we worked remotely, using virtual human-centred codesign to understand how in-home learning could be supported including specifically the role of digital technology.

I would like to thank these communities' members immensely for their trust and collaboration with the project team.

I would also like to thank the Paul Ramsay Foundation for its support of this project.

This report sits as a companion report to 'Remote Access Matters' which provides detailed insights gained through our research and codesign with two remote communities.

Australia is yet to provide remote communities with the high-quality, accessible early learning their children deserve. We hope that by sharing our insights and approach we will help other organisations to further explore the development of sustainable, scalable, high-quality education and care offerings so vital to advancing education in remote communities.

We hope this report helps stimulate your thinking as you prepare for your own journeys – or as you support others with theirs – and we invite you to reach out and connect with us so that we can work together into the future.

A handwritten signature in black ink, appearing to read 'Ros Baxter'.

Ros Baxter
CEO

About Goodstart Early Learning

Goodstart was founded by a partnership of four of Australia's leading charities who recognised a child's early years experiences had a huge influence on the rest of their lives – The Benevolent Society, The Brotherhood of St Laurence, Mission Australia, and Social Ventures Australia.

For more than a decade Goodstart, as a not-for-profit social enterprise, has been creating positive social change by giving Australia's children, especially our most vulnerable, the best possible start in life through access to high quality early learning and care.

Today, Goodstart is Australia's largest provider of early learning and care and Australia's largest non-government provider of preschool and kindergarten programs.

With 15,000 employees including 2000 teachers we provide high quality early learning to more than 63,000 children across over 660 centres nation-wide.

Around one third of our centres are in rural and regional areas and around one quarter are in low socio-economic areas.

Our commitment to reconciliation is woven through everything that we do.

As part of our commitment Goodstart has invested in cultural awareness training with 16,000 team members completing the Arilla course since its introduction.

Our First Nations Leaders, First Nations Voices Group and First Nations Yarning Circles help us to deliver culturally safe spaces for the hundreds of Goodstarters who identify as Aboriginal and/or Torres Strait Islander.

We recognise and respect Aboriginal and Torres Strait Islander peoples as the First Peoples of Australia and as the Traditional Custodians of the land on which we work.

Our vision for reconciliation is for Goodstarters to engage with reconciliation on both a personal and professional level, creating the conditions that support Aboriginal and Torres Strait Islander social justice, equality and equity.

Through this vision, we are laying the foundations to grow future generations that value and recognise Aboriginal and Torres Strait Islander cultures and heritage as a proud part of a shared identity.

www.goodstart.org.au

About Today

Today are a globally-recognised design agency who create social impact through design, technology and innovation. They are a certified B Corporation with human-centred design at the core. Experts in managing complexity, Today are regarded as industry leaders in designing and delivering world-class project solutions that are community-led, with a particular focus on giving a voice to marginalised and vulnerable users. www.today.design



The project team arrives on Ngurupai for the first time in September 2022. From left to right: Katie Kaufmann, Marcus Procida, Angelica Scott, Magidama Enosa, Amanda Waters and Peter Pilot-Wakaisu

The Project

Over 10% of Australia's children live outside of cities and major towns in parts of Australia classified by the Australian Bureau of Statistics as very remote, remote, and outer regional. These environments offer children and families a unique array of rich life experiences. At the same time, they are often significantly underserved by child and family support services (including education and care services such as long day care).

Children are significantly more likely to be developmentally vulnerable on the Australian Early Development Census – recognising this is a partial measure of children's strengths and capabilities, but still a powerful predictor of future school and life opportunities.

In 2022, Goodstart embarked on a journey to consider the question:

How might we address disproportionate developmental vulnerability for remote children by codesigning sustainable, scalable, high-quality education and care offerings that advance education within Australia?

We adopted a codesign approach, working closely with communities to understand their strengths and their unmet needs. Through this, the work aimed to identify sustainable and impactful ways forward, and to understand the implications for creating broader scale impact. Considering time, funding and prior work at Goodstart, we selected two focus communities.

The first was the **First Nations community of Ngurupai in the Torres Straits**. As part of our commitment to reconciliation, we had begun to establish relationships on Ngurupai over the past twelve months. Using an approach grounded in participatory action research and decolonising design, we immersed ourselves in community in order to work together to answer the question:

How can First Nations communities be supported to help their young children grow up strong?

We saw that our insights would be both specific to the Ngurupai community and could potentially provide insight to help inform future work with other First Nations communities, recognising every community is unique.

Source - <https://www.vu.edu.au/mitchell-institute/early-learning/childcare-deserts-oases-how-accessible-is-childcare-in-australia>

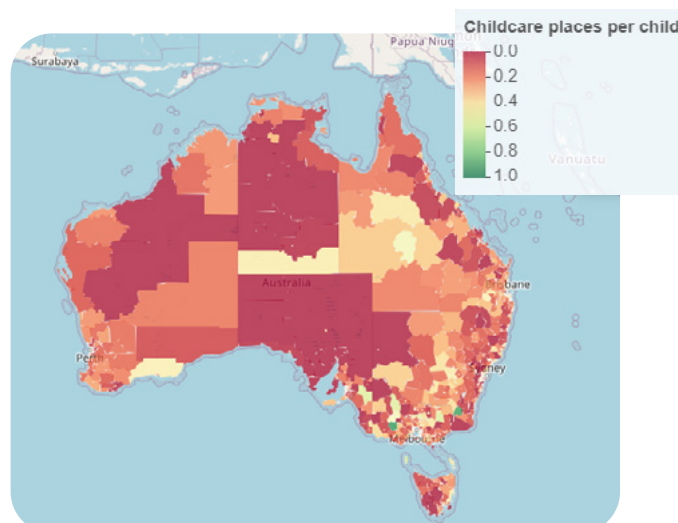
The second was a community in **Remote Queensland**. Building on our experience with providing virtual early childhood services during the first two years of the COVID-19 pandemic, we wondered about the potential of supporting in-home learning for remote families without access to long day care services. We used a virtual human-centred codesign approach to engage with families to understand:

How can in-home learning be supported in remote communities – and specifically, what is the role of digital technologies?

Through this, we sought to understand the role of virtual services and how these fit within the broader ecosystem. To this end, we also spoke to representatives from a number of Remote Queensland service providers to understand their perspectives.

To amplify our existing organisational capability, we engaged with the strategic design firm Today to help carry out this work.

This report shares insights into the strengths and needs of each community. We offer these up to support our sector to work in partnerships with communities to create a stronger early years ecosystem for remote children and families. This report accompanies the report on our approach, Remote Access Matters in response to complex social challenges, which provides detailed insights gained through our research and codesign with two remote communities.



Stream 1: Key reflections

Decolonising participatory design with First Nations communities

In working with the Ngurupai community, we were very conscious of the work First Nations peoples have carried out together for many thousands of years to research and improve the health and wellbeing of their communities (Sharmil et al., 2021).

We were also very conscious that the overlay of Western approaches to research, service design and service delivery has often produced little value for the communities themselves (Madden, Cadet-James, Atkinson, & Watkin Lui, 2014; Queensland Productivity Commission, 2017; Wilkin & Liamputtong, 2010). Deficit discourses, unconscious biases, and Western worldviews can run counter to narratives of strength and self-determination, whilst Western research and design paradigms can act as yet another form of social control when they work to privilege and disseminate so-called “superior” Western knowledge (Brereton et al., 2013; Haynes et al., 2021; Reitsma, Light, Zaman, & Rodgers, 2019). Such “good intent” can act to further colonise communities (Akama, Hagen, & Whaanga-Schollum, 2019; Moran, Harrington, & Sheehan, 2018; Reitsma et al., 2019).

Colonisation is not a past doctrine; its violations and intrusions are embedded systematically in the assumptive framework of modern societies. Colonising design is silently enacted and is so prevalent among modern societies that it is often invisible.

Moran et al., 2018, p. 72

[Approaches] ...that do not meaningfully address inequities or acknowledge Aboriginal ways of knowing, being and doing can result in ‘collateral damage’ such as “stigma, internalised blame, emotional suffering and hypervigilance that reproduces structural violence”.

Haynes et al., 2021, p. 2

Given this, we sought to apply participatory design approaches that privileged First Nations knowledges and voices.

Participatory Action Research was not new to Indigenous people. Indigenous knowledge systems facilitate participatory practices which strengthen the health of the culture and the community... Participatory Action Research emerged from the comprehensive principles and practices of Indigenous people developed across time for the purpose of creating holistic, sustainable and healthy communities through a process of collective consultation and collective action.

Dudgeon et al., 2020, p. 13

It was critical that the community were the primary beneficiary of the work – that is, that the community themselves would benefit in tangible ways both from their participation in the process of codesign and from the outcomes of the design (Madden et al., 2014; Reitsma et al., 2019; Skerrett et al., 2018). The 2022 Closing the Gap campaign report highlights the importance of this, declaring “initiatives that recognise Aboriginal and Torres Strait Islander leadership, that provide genuine opportunities for decision making, and strengthen and embed cultures, do and will lead to positive sustainable improvements in health and wellbeing” (Lowitja Institute, 2022, p. 4).

Reflection

This was our first organisational foray into decolonising codesign work with a First Nations community. We strove to be reflexive practitioners, who acknowledged and respected Aboriginal and Torres Strait ways of knowing, being and doing; uncovered our own assumptions, biases and racial prejudices; and recognised and responded to the power imbalances in the designer-participant relationship (Abdulla et al., 2019; Bird et al., 2021; Haynes et al., 2019; Haynes et al., 2021; Laird et al., 2021; Lowitja Institute, 2022; Satour & Goldingay, 2021).

Over the next three pages we offer our reflections on key decolonising participatory design practices we identified in the literature:

- Governance and guidance
- Design methodologies
- Local ownership



Governance and guidance

Establish an Early Childhood Advisory Group to lead and own the work – including determining the focus and approach for the work.

Laird et al., 2021; Rix et al., 2014; Sharmil et al., 2021; Skerrett et al., 2018

On a prior trip by Peter (our Torres Strait Islander Cultural Liaison), the Ngurupai Early Childhood Advisory Group had self-formed around the tables outside the local supermarket – a group of passionate women seeking better outcomes for young children who wanted to reopen the long-closed long day care centre on the island.

On each trip we met with members of this group several times to ensure this work was in service of community needs.

The pace of the work put a significant ask on Advisory Group members, many of whom worked during the day, and we grew to be more relaxed about who exactly would attend when and what time things would kick off – something that made us quite anxious at the start.

Obtain community consent.

Dreise, 2018

The first conversations in the lead-up to this work built on Peter’s existing connections with the Ngurupai community.

As the opportunity for this piece of work became clearer, Peter also connected with Uncle Milton Savage, the Chairperson of the Kaurareg Native Title Aboriginal Corporation (KNTAC) to gain his permission for this work. This was obtained verbally. We had hoped to reconnect with Uncle Milton on later trips, however our diaries did not align. It is important that work like this allows generous time for connecting with important community stakeholders, including Elders, who often have many demands on their time.

Seek mentorship by community Elders.

Sharmil et al., 2021

Members of the Advisory Group as well as older Elders from within the community shared with us their wisdom around past services on Ngurupai and what meant these struggled or thrived and guided us in how to connect with the community today.

As trust built, Elders honoured us with significant openness to shape a powerful way forward together.

Create feedback loops to interpret and validate insights and designs.

Laird et al., 2021; Nasir et al., 2021

We held four sessions with the Advisory Group focused specifically on sharing-back our interpretation of insights and emerging design.

Through these sessions, members added significant clarification and depth, resulting in a much stronger – and more collectively owned – way forward.

We found in these sessions that posting insights and designs on the wall for participants to explore at their own pace resulted in much richer conversations after – our first attempt at “presenting” these was overwhelming for some.

Design methodologies

Use approaches such as yarning that foreground the development of strong and reciprocal relationships.

Carlisle et al., 2021; Laird et al., 2021; Lethborg et al., 2022; Peters et al., 2018; Satour & Goldingay, 2021; Sharmil et al., 2021

Yarning was central to our approach.

We held drop-in sessions at the sports complex as well at community BBQs. On one occasion we had to relocate to the pergolas down by the beach when a bush fire encroached on the sports complex. Most of the days we were on the island we were available between 2pm and 8pm, and we also yarned informally in the supermarket, at the general store, by the beach, and on the ferry. Our focus was on connecting with people when and how they felt comfortable – and this meant forgoing home visits as Peter advised these would not be appropriate at this time.

Flexible hours supported community engagement. However, not knowing when people would turn up – or how many would turn up at once when they did – often left us in a state of restless anticipation that made it harder to manage our time for other work in the in-between spaces.

Environmental conditions demanded ingenuity. Working by the light of the iPhone torch in the dark. Finding ways to involve and occupy children, from offering our cameras to engage them in documenting our process to starting up impromptu ball games. Listening intently in a very acoustically challenging space. We were proud of the way we flexed, and yet also sometimes challenged by the “missed opportunity” to dig deeper into something that the environment didn’t allow.

Spoken English levels are strong in general on Ngurupai, although English is a second, third or fourth language for many people. Most people spoke with us in English, but some preferred to converse in Creole. Magidama, the Torres Strait educator on our team, played an invaluable role both in fostering trust and in yarning in Creole when required. As our trips progressed, Magidama built skill and confidence in facilitating design activities, including prototyping.

Employ visual and tactile tools and methodologies, such as art or photovoice.

Flicker et al., 2014; Liew et al., 2022; Schwab-Cartas & Mitchell, 2022; Wilkin & Liamputtong, 2010

In addition to yarning, we employed some simple visual tools which significantly enhanced the process and outcomes. Posters and photos on the walls allowed people to sit with and sense-make around possibilities at their own pace before discussing as a group. A card sorting activity allowed people to point to preferences – for some, this allowed participation with minimal verbal communication, for others it created the jumping off point for a yarn.

We also ran a live prototype of a playgroup, where families shared their reflections as they engaged in learning experiences with their children such as creating art with playdough or drawing together. This drove rich learning, and worked to build excitement around the possibility of future early childhood services in the community.

There were other visual and tactile tools we considered for our Community BBQ and prototyping day, but had to simplify our aspirations to balance design and logistical needs. This highlights the significance of creating the space for varied tools over time for maximum insights and engagement.

Local ownership

Upskill local community members to lead the codesign process – “if the risk feels small, it is unlikely power has been sufficiently transferred over to users”.

Andersson et al., 2019; Peters et al., 2018, p. 99

As our first foray into this sort of design with a First Nations community, our combined Goodstart/Today team led the codesign process.

Our team did however include two Torres Strait Islanders, Peter and Magi (a Goodstart educator from our Cairns centre), who did not have a design background. Throughout the process, Peter and Magi played a key role in navigating design approaches that would work for the community and facilitating yarns with both families and community members. Through this, they built their own codesign expertise.

With the pace of the work, we sometimes found ourselves in an uneasy tension between moving at pace with the design work and making the space for the whole team to consider how we could best move forward, particularly as pinch points such as the community BBQ approached. More space was needed in the work to allow for the team to yarn together as well.

Upskilling community members to lead the codesign process is an area we hope that we – and others – are braver and more ambitious with in the future.

Use “own words” and culturally meaningful metaphors to describe and share the work.

Haynes et al., 2019; Rix et al., 2014

We captured key quotes in people’s own words to help tell their story. However, we didn’t audio-record conversations which created some limitations around this.

By sharing the community’s story back with the Advisory Group we were able to ensure this resonated with the way they wanted to tell their story.

We didn’t find ourselves using any specific culturally meaningful metaphors to describe and share the work – perhaps a factor of not embedding anyone from a communications design background on the team. We also did not have a designated photographer which meant we were constantly trying to remember to take photos as we went, although we did engage a local videographer to capture our community BBQ so that key community members could tell their story on camera.

Share all outputs, including data, photographs and artefacts, with the community.

Laird et al., 2021

Throughout the process, we shared draft artefacts with the Advisory Group, and left insights and photos up on the wall for the wider community to view when they joined us at the sports complex. In our final visit in December 2022, members of the Advisory Group expressed pleasure that the summary artefacts shared felt like a true representation of the story they wanted to tell and the direction they wanted to head.

Copies of the final artefacts from this trip were provided to the Advisory Group (both the large posters and smaller printed copies in a folder). Copies of all photographs used in our reports on the project were shared with the community.

We did not share the raw data shared with us by individual families, as we reflected in retrospect that we had not discussed this upfront nor specified it in our consent. The advantages and disadvantages of sharing this identifiable even if deidentified data back with the community should be explored in future.

Stream 2: Key reflections

Virtual design with remote communities

As did many in response to the COVID-19 pandemic, designers at both Goodstart and Today moved online, using a variety of virtual mediums to continue collaborating and codesigning with diverse groups.

We decided to employ a virtual approach for this stream of work for four key reasons:

1. To explore the strengths and limitations of a virtual approach with remote communities.
2. To gain access to a wider pool of participants across remote Queensland.
3. To learn about the way families engaged with digital technologies throughout the design process itself, given we were interested in the potential role of digital technologies in supporting in-home learning.
4. To manage travel, logistics and budget, given our contemporaneous immersion on the ground in Ngurupai for Stream 1.

Prior to the pandemic, the literature around virtual codesign was scant and although this has begun to shift it remains an emerging field (Hall et al., 2021; Kennedy et al., 2021; Osborne et al., 2022). Our work offers a unique perspective as a large for-purpose service provider using virtual design to identify new ways to meet the needs of people currently excluded from services through geography.

Our approach was successful in identifying promising future directions. At the same time, upon reflection on our approach we identified ways we might have further enriched our insights and better mobilised participants and others in the pursuit of child outcomes.

Most importantly, we propose that virtual codesign approaches must prioritise the development of strong multidirectional relationships between participants, team and other stakeholders if they are to meaningfully address complex societal challenges.

We suggest that hybrid approaches (that is, a blend of virtual and physical design) are needed to avoid perpetuating inequities, to build contextual understanding, and to mobilise people to create an unstoppable force for change.

Ultimately, we reflect that our approach for Stream 2 is best described as virtual human-centred design rather than virtual codesign, in particular in consideration of the codesign principles shared on page 18 of this report and in contrast to the codesign approach taken in Stream 1.

Over the next two pages we offer our guidance for undertaking virtual codesign / virtual human-centred design based on our experience and the emerging literature.

A note on virtual codesign

Virtual codesign is also known in the literature as online codesign, web-based codesign, and distributed codesign – although this latter term more broadly encompasses all codesign that is conducted at a distance regardless of modality. Related terms include virtual research and asynchronous research (noting that not all virtual research is asynchronous, and not all asynchronous research is virtual).

Relationships are central to virtual codesign for complex problems

Many features of virtual codesign create distance between participants, including facilitators (Bowden & Galindo-Gonzalez, 2015; Constantin et al., 2021; Fails et al., 2022; Fouqueray et al., 2023; Galabo et al., 2020; Hillman et al., 2015; Savoy et al., 2022; MacLeod et al., 2017; Mallakin et al., 2023; Osborne et al., 2022). Sessions are usually shorter. Video provides fewer visual and contextual clues – and even more so when people are camera-off or only able to participate via voice call. Opportunities for more informal connections around sessions are lost. As a result, rapport is harder to build and attempts at virtual codesign can easily become transactional and extractive.

We observed this in our own approach, exacerbated by a change in facilitators between the virtual engagements. We were struck by how very different this was to our experiences in Ngurupai for Stream 1.

While our more transactional approach still pointed the way to future focus areas, we believe that getting deeper into each of these (or other) spaces will require deliberate attention to fostering the trusting relationships needed for true collaboration.

Immersion (past or present) greatly supports sensemaking

Data gathered virtually can tell an incomplete picture, reducing understanding and impeding sensemaking (Fouqueray et al., 2023).

One member of our team had worked previously with remote communities, and their insights were invaluable in enabling us to contextualise our learnings. We also engaged Goodstart educators who had worked in regional and remote communities late in the process to enrich our understanding. We became very aware however of the very basic gaps in our knowledge – for example when mothers on cattle stations said they would value playgroup services that came to them, we realised we were unclear if multiple families lived on a single station. We felt the lack of opportunity to absorb knowledge through immersion in the community.

Hybrid approaches that pair virtual codesign with some in-person immersion are likely to create richer understanding as well as fostering stronger relationships.

Choose methods and tools carefully for depth, generative collaboration, and momentum

There is a growing literature outlining the effectiveness of different virtual codesign methods and tools (Bowden & Galindo-Gonzalez, 2015; Constantin et al., 2021; Fails et al., 2022; Hall et al., 2021; Hillman et al., 2015; Liegghio & Caragata, 2021; MacLeod et al., 2017; Mallakin et al., 2023; Zhang et al., 2022). Achieving optimal outcomes requires more than mimicking physical approaches in a virtual environment.

We engaged in asynchronous design research using a combination of text, photo and video combined with semi-structured Zoom sessions with individual participants that leveraged cards displayed on Facebook to discuss and rate challenges and idea concepts. This effectively guided our future direction however more nuanced approaches are needed to authentically address complex challenges including methods and tools that open up collaborative and generative spaces.

Ample time should be allocated to designing, testing and iterating the virtual codesign approach when attending to complex challenges. Careful consideration should be given to what in-person activities may be needed to accompany virtual codesign activities.

Care is needed to avoid perpetuating inequities

Virtual approaches can widen access by decreasing time commitments and eliminating barriers such as travel (Binder et al., 2022). However, they can also perpetuate inequities (Beresford et al., 2021; Fouqueray et al., 2023; Mallakin et al., 2023).

We experienced this on two fronts. Firstly, our virtual approach did not reach the First Nations communities in our focus locality. Secondly, of the mothers who felt sufficiently comfortable and technologically confident to participate, participation was constrained for some through limited device or internet access.

Hybrid approaches are likely to be needed to address this.

Recruiting virtually requires time and relationships

Recruiting virtually theoretically opens up the pool of participants (Constantin et al., 2021, Kennedy et al., 2021). However, like others we found this did not automatically make it easy to reach these participants (Hillman et al., 2015).

Recruiting was challenging and took significantly more time and resources than anticipated. We ultimately found success through cold calls to remote townships where we were fortunate enough to connect with someone in an educational leadership position who was also a new mother. She rallied others in the district to participate in this work.

Long lead times that allow time and space to develop relationships with potential participants and/or potential partners with access to participants are necessary to engage hard-to-reach populations. Money alone cannot solve this problem as recruitment agencies may also be unable to reach these participants.

Creativity and patience are needed to handle technology limitations

Technology issues are unsurprisingly a common theme in virtual codesign (Bowden & Galindo-Gonzalez, 2015; Constantin et al., 2021; Hillman et al., 2015; Kennedy et al., 2021; Osborne et al., 2022).

We experienced limitations with hardware (for example, some mothers only had access to a mobile phone), voice and internet connectivity (for example, one mother participated in a session from her car on the side of the road to get reception), applications (for example, Facebook was an awkward tool for concept testing), and media files (for example, the videos uploaded by one mother had no audio).

Some technology limitations are solvable with careful planning. Others require a contingency built into the design approach to accommodate them as they arise.

Virtual codesign is resource intensive – it is not the ‘quick option’

Although Kennedy et al. (2021) suggested virtual codesign could save money, others have found it to be heavily resource intensive (Bowden & Galindo-Gonzalez, 2015; Osborne et al., 2022).

We underestimated resourcing at every stage which extended project timelines, created pressure for team members, and allowed less opportunity for the thoughtful reflection needed throughout the project to optimise the approach at each step.

It is critical that virtual codesign is not viewed as an easier, cheaper, or lighter-touch alternative to physical codesign. Rather, it may require greater investment of time and energy if it is to lead to a great virtual experience for participants and genuinely impactful solutions to complex challenges.

Provocations: codesigning with remote communities in response to complex challenges

We invite people responsible for creating projects of this type (funding, policy or other conditions to support such work) to consider these provocations we hope will help you to support teams to deliver real impact.

- What makes your problem a **complex challenge** at the relational, local and systems level? What does your approach need to look like to reflect and meaningfully respond to this complexity?
- Where does the **power** sit in this space and with this work? What risks do you need to take to transfer power to communities?
- Whose **voices** are heard and whose are silenced in this space? How can you avoid perpetuating inequities through your approach?
- What **upfront relationships** are needed for this work to succeed? How can you allow the time and space to build these?
- Whose **consent** – individual and community – is needed to undertake this work? What do individuals and communities need to confidently and comfortably give their permission for this work?
- How would privileging **relationships** in your approach help create impact? What implications does this have for the design approaches you select?
- What depth of **generative collaboration** is needed for your work to create impact? What implications does this have for the design approaches you select?
- What role can and should participants play in **interpreting insights** and potential solutions? How can you create the feedback loops that enable participants to meaningfully engage with and shape these?
- What **momentum** is needed in the community and beyond for this work to create impact? How can you begin to build this from the very start of the work?
- What could **virtual approaches** bring to your work, and what could they lose? What else might be needed alongside a virtual approach to respond to the challenge you are addressing?
- What could **immersion in community** bring to your work, and what challenges could it come with? What is needed to support your team and their wellbeing during this work?
- What design approaches are needed to make the process **accessible** for participants? How could visual, tactile and other mediums enable richer participation in your work?
- Who should own the **data** for this work? What data governance systems and permissions need to be establishing upfront to enable this?
- How can the existing **evidence base** and work of other organisations help inform the codesign process? What capacity is needed both before and during the codesign work to support this?
- What can be pre-planned with your work, and where may **improvisation** be needed? How can you create the time, space and flexibility for this to occur?
- When engaging in work with community – especially First Nations communities – what tensions might arise between your organisation’s usual ways of working and the **community’s rhythms and ways of working**? What does your team need to navigate these sensitively and successfully?



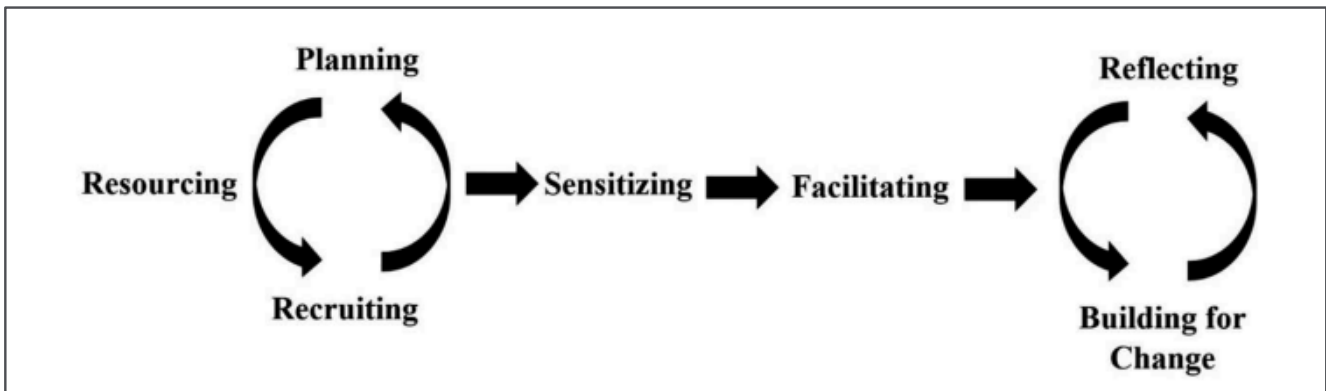
Detailed Approach

Seven Steps of Codesign

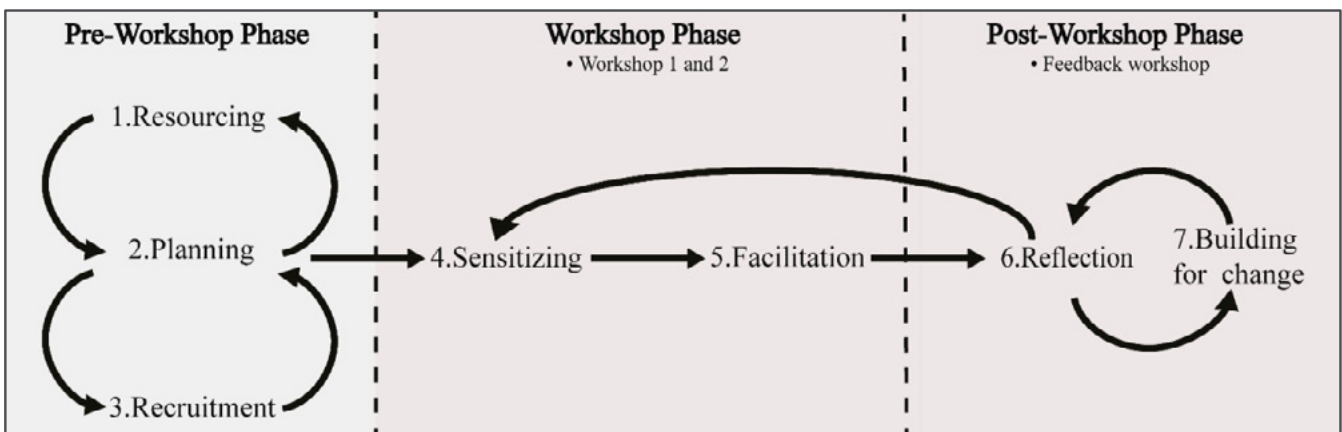
To reflect on our approach in more detail, we draw on the seven steps of codesign for public services developed by Trischler et al. (2019) and extended by Kennedy et al. (2021), based on earlier work by (Dietrich et al., 2017).

We selected this lens for three reasons. Firstly, it was developed for public service work aimed at “addressing complex societal problems” which aligns with the challenge and opportunity in front of us as we look to address disproportionate developmental vulnerability for remote children. Secondly, it focuses on the early idea-generation stage of codesign as did our work. Thirdly, Trischler et al. (2019) applied it to face-to-face codesign whilst Kennedy et al. (2021) specifically examined virtual codesign, demonstrating the relevancy of the model for both our streams.

The two version of the model are shown below.



Trischler et al. (2019)



Kennedy et al. (2021)

At its simplest, each step can be described as follows:

- **Resourcing:** Initial literature review and expert interviews.
- **Planning:** Specification of design task, aims and approach.
- **Recruiting:** Identification, screening and recruitment of suitable participants.
- **Sensitising:** Engaging participants and triggering reflections prior to participation.
- **Facilitating:** Facilitating codesign activities.
- **Reflecting:** Shaping and testing the value of solution ideas.
- **Building for change:** Collaborative and iterative effort to build viable solutions that receive user and stakeholder support.

Legend

- Pla** Planning
- Res** Resourcing
- Rec** Recruiting
- Sen** Sensitising
- Fac** Facilitating
- Ref** Reflecting
- Bui** Building for change

Codesign principles

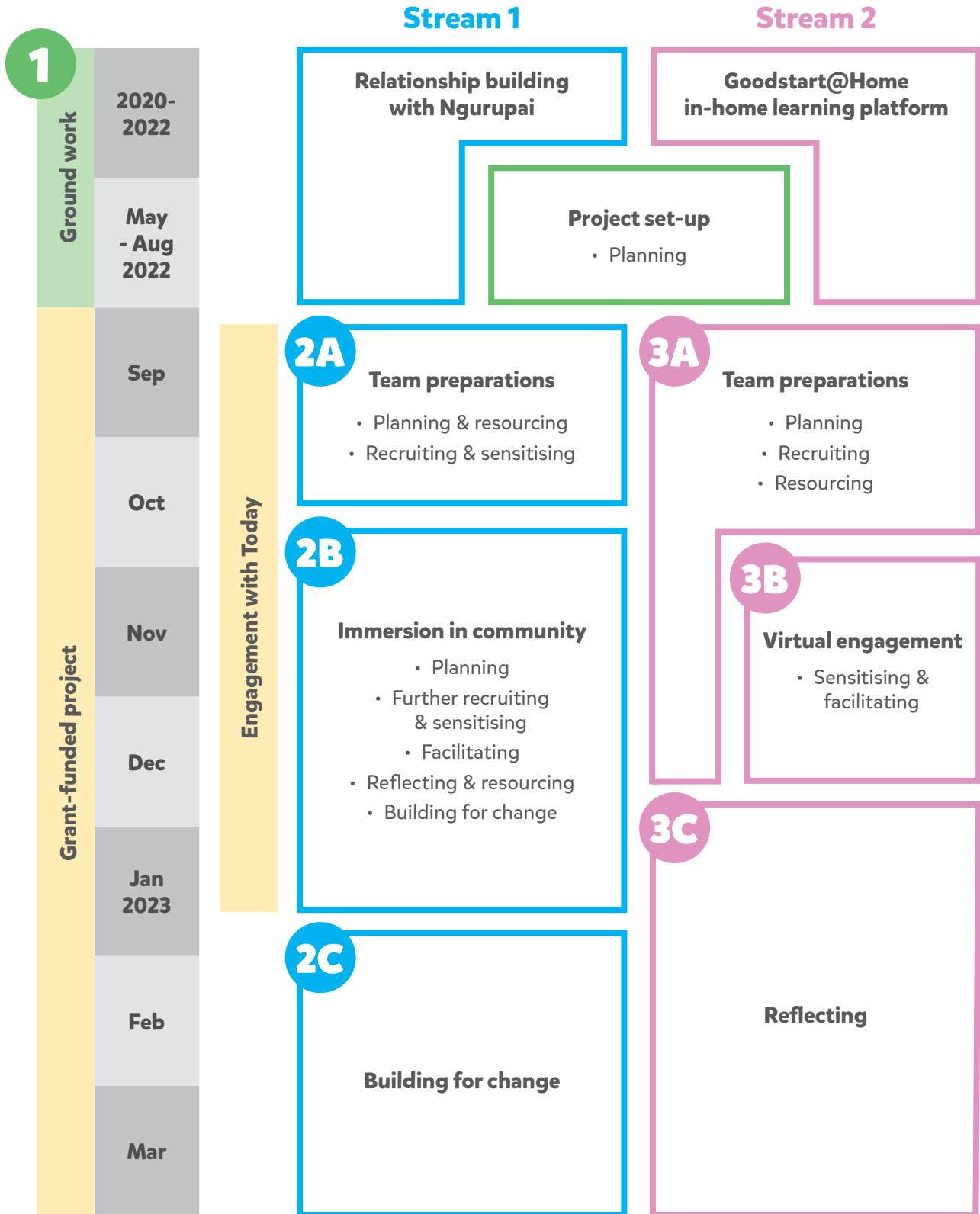
There are many ways to work together. Underpinning our approach, are key principles of codesign that we value, to take a strengths-based approach to design and reflection. Engaging in authentic codesign requires different ways of thinking and being, and these principles helped to guide us in our approach.

Priorities partnership	Lived experience is a part of every chapter.
Share power	Challenge and shift the power imbalance. Share decision making.
Make and act	Go beyond talking. Generate ideas and solve for a shared challenge.
Build on strengths	Understand the past to design for the future and be trauma informed.
Learn by doing	Build and empower new ways of working, mindsets and skills.

Source: *today.design*

Our timeline

In the following pages we will follow this timeline, aligned with the seven steps, to provide detailed insights into our journey.



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Groundwork (1)

Relationship building with Ngurupai

The groundwork for this project was laid over a number of years.

As an organisation Goodstart began its journey to reconciliation in 2014 with our Stretch Reconciliation Action plan and have been supported by the appointment of Melody Ingra as our National Cultural Liaison in 2017.

In 2021 Goodstart appointed our first Torres Strait Islander Cultural Liaison, Peter Pilot-Wakaisu, to help deepen our awareness of Torres Strait Islander culture and heritage and to help us to support Torres Strait Islander children to achieve the learning, development and wellbeing outcomes they need for school and life.

Over the course of 2021 and early 2022, Peter made several trips to the Torres Straits (where he had previously lived and worked) to foster connections with the local community. Through these visits, the community on Ngurupai approached Peter around the possibility of working together to reopen the former long day care centre.

On one visit, the Ngurupai community decided to form an Early Childhood Advisory Group to represent the interests of the children and wider community by advocating for the centre reopening. This comprises 13 members of the community including elders, parents, grandparents and traditional landowners, and is chaired by Aunty Emma Beckley.

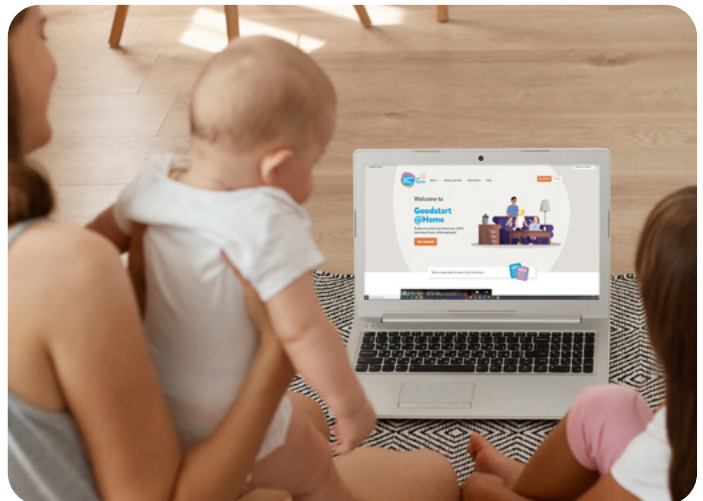
When this project was funded (and we expected it would complement efforts to reopen the centre) Peter was well placed to explore this with the Early Childhood Advisory Group. He obtained their permission for the work, and also followed cultural protocols to obtain permission from Uncle Milton Savage as the chair of the Kaurareg Native Title Aboriginal Corporation.

As a result, we started our project with strong local relationships and an invitation to collaborate with the Ngurupai community.

Goodstart@Home in-home learning platform

As an organisation Goodstart has a strong commitment to continuous learning and for setting ourselves stretch targets and strategic plans to ensure we are always asking more of ourselves as we strive to meet the purpose our founding partners had set for us.

As part of this philosophy, in 2016 Goodstart commenced a participatory speculative design journey to reimagine what we might offer to children and families and what kind of an organisation we would need to be to realise this.



One significant outcome of this work was an expanded recognition of the need and potential of offers that strengthened the in-home learning environment.

When the COVID-19 pandemic struck in 2020, many children were unable to access long day care. This groundwork enabled us to move quickly over the course of several weeks to develop and launch a digital platform with evidence-informed early learning resources for parents and carers to use to support their children's learning at home.

Across our network of 661 centres, educators also pivoted to explore a variety of ways of supporting children and families in the home.

In 2021, we explored the possibility of further developing our digital offering as an adjunct to our long day care centres but were not able to clearly demonstrate desirability for a digital offer to families already attending our services. However, we wondered if this might be different for families in remote communities without access to physical centres.

In Stream 2 we started our project with a digital platform and the desire to understand if and how we might build on our pandemic experience with in-home learning to support children and families in remote communities without access to physical centres.

Setting up the project

We saw this as an opportunity to build on our organisational experiences with the Ngurupai community and the Goodstart@Home platform.

This set-up phase was led by four members of the Goodstart Executive, including the initial Project Lead, and was supported by two members of our Experience Design team as well as our Torres Strait Islander Cultural Liaison.

It involved:

- Working with the Paul Ramsay Foundation to negotiate the grant agreement.
- Developing the proposal required us to **plan** the project at a high level, as we drew on our combined experience and expertise to decide the overarching objectives and budget envelope required.
- Some **resourcing** was also carried out at this time, primarily to evidence the need for this work.
- Tendering for a design consulting firm to complement our existing internal skills and capacity. Through this process we deepened our **planning** as we assessed their proposals for how they might partner with us to carry out this work.

The project team included:

- Principal Strategist
- Torres Strait Islander Cultural Liaison
- Service Designer
- Pedagogue (40% FTE)
- Torres Strait Islander educator seconded from a Cairns centre to the project

Later, a second Service Designer joined the team to further expand design capacity.

The project steering committee included:

- General Manager Social Impact
- General Manager Pedagogy and Practice
- Goodstart's then Chief Executive Officer

Trischler et al. (2019) describes resourcing, planning and recruiting as happening iteratively at the “fuzzy front end” of the codesign process and during this initial project set-up period our primary focus was on planning to a sufficient level of detail to enable the project to commence.

This set the parameters for further resourcing, **planning** and recruiting once the project team was assembled.

This approach presented a challenge as the internal team was only fully resourced right before the design consultants from Today commenced their intensive engagement. This created a compressed time period for the team to engage in further iterative resourcing, planning and recruiting – we recommend projects are structured to allow more time for the team (including any external consultants) to engage in this important upfront work for optimal outcomes.



Stream 1: Grant Funded Project (2)

How can First Nations communities be supported to help their young children grow up strong?

Team preparations (2A)

To inform our planning, we reviewed the published literature around both:

- early childhood services in First Nations communities.
- decolonising design with First Nations communities.

As mentioned, our timelines were short and the iterative process of planning and resourcing was curtailed, so this deep dive was conducted on nights and weekends – and even in the air on the way to our first trip. As a result, the team had less time to “sit” with these insights together, which would have further enhanced our work.

Upon reflection we are proud of how we had engaged with community in ways that supported them to elevate their voice and build local ownership and momentum.

As a team, we all shared a passionate commitment to outcomes for the community. Yet the very strength of this commitment sometimes made us less flexible and less open in navigating inevitable practical tensions we encountered in our approach. For example:

- Should we maximise the number of hours we were available in the sports complex each day to provide flexibility to the community, or shorten our hours to the most popular times for drop-ins to allow more space for reflection and support of team wellbeing?
- Should we provide financial incentives to everyone who dropped into the sports complex regardless of the nature of the engagement as a sign of respect, or carefully manage payment of incentives to ensure the project budget did not run short and compromise outcomes?
- Should we follow up with the Advisory Group to confirm who would be attending a session to facilitate planning, or adopt a more improvisational approach based on who attended on the day?

Each of these questions, small in isolation, could become a source of tension. We share our experience because while the details of our experience may be unique to our team, we suspect we are not alone in experiencing such tensions, especially when working as a new team away from home in a remote community.

As a result, we would recommend adding **team building** as an additional key step in the beginning of any codesign process. This would allow time for both team members and external consultants to build a solid foundation prior to immersion in community.

During the time the team were engaged in **planning** and **resourcing**, Peter Pilot-Wakaisu, our Torres Strait Islander Cultural Liaison travelled to Ngurupai to commence the process of engaging and recruiting families.

On the back of the community’s invitation to collaborate, the recruitment of individual families was very much a community process. Peter spoke with families he had established relationships with and interacted with families he met around town in the supermarket and down at the ferry dock. Members of the Early Childhood Advisory Group reached out and connected with their networks. By the end of Peter’s visit, many families with young children had expressed their interest in participating.



Trischler et al. (2019) and Kennedy et al. (2021) speak of ‘**sensitising**’ as structured activities participants undertake in advance of workshops. Here, with our immersion in community and more fluid approach to codesign we found sensitisation was effectively achieved through the conversations about this work that built across the community. This started before the project commenced, continued during Peter’s recruitment visit, and flowed for the duration of the project as the community talked to one another, and people stopped us in the street or at the supermarket to talk about what we were doing.

We suggest in this context, **sensitising** may be more helpfully thought of as engagement that builds trust and conversation across the community.

Immersion in community (2B)

Before travelling to Ngurupai, we had developed a broad plan to conduct four visits to Ngurupai to facilitate relationship building, research and prototyping.

We kept the finer details of our design process fluid however, to allow us to learn with community to determine what would work. We heard repeatedly from the community about their past experiences with outsiders who came “knowing the answers” and therefore failing to listen. This meant that **planning** was an ongoing iterative process throughout the whole project, not only at the “fuzzy front end” described by Trischler et al. (2019).

We believe that teams should focus on building their skills in fluid planning and improvisation, rather than striving to develop a single protocolised approach.

Here we outline key steps in our ultimate process along with important design methods employed, recognising that whilst this is not and should not be a step-by-step playbook to be copied elsewhere, it may provide helpful guidance for others undertaking similar work.

Engagement Calendar

16-20 Oct	Trip 1: Relationship building and yarning
1-9 Nov	Trip 2: Yarning
14-23 Nov	Trip 3: Prototyping
1-6 Dec	Trip 4: Prototyping & planning

Recruiting and **sensitising** continued throughout our trips. On our first three visits in addition to families who had already expressed interest we actively recruited other families at the supermarket and the playground. As we built our presence in the community, families we hadn't met began to approach us to ask how they could participate. As we were unsure when families would choose to drop into the sports complex to yarn with us, we were constantly re-planning our other work to accommodate.

We were conscious that by the end of our time on Ngurupai in late 2022 there were still families with young children we had not spoken with, and we continued to consider ways in which we might invite these families into early learning on Ngurupai.

Some of these families have since participated in the new monthly playgroup, which has also created a platform for both parents and other younger community members to start advocating for the importance of the early years. However, we highlight that immersion within community does not by itself protect against the exclusion of some families.

Our approach to **facilitation** was grounded in yarning – that is, we focused on conversational approaches that helped to build trusted relationships and facilitated the telling of stories. We **planned** the details of each session as we went to allow significant space for improvisation depending on who attended and how the conversation flowed.

Key facilitation touchpoints

Families	Yarning (mostly with individual families but in small groups if preferred) <ul style="list-style-type: none"> • Your story • Your daily life • Your hopes and dreams for your children • Your culture and community 	Live playgroup prototype <ul style="list-style-type: none"> • Engagement of adults and children in learning (observation) experiences • Informal yarning during play around own experiences of learning/parenting 	Card sorting prototype activity <ul style="list-style-type: none"> • Selection of desirable elements of early learning and care services • Yarning about why these elements were important
	Advisory Group	Yarning (individually) <ul style="list-style-type: none"> • Your story • Your culture and community • Your past experiences of services on Ngurupai • Your hopes and dreams for the community 	Codesign sessions (~2 hour group sessions in the evenings) <ul style="list-style-type: none"> • Hopes and dreams for the community • How to engage with community • Learning from past services • Collective exploration of lo-fi prototypes • Review and interpretation of insights • Envisioning the way forward <p>The final session was a half-day session on a Saturday that also involved other community members invited by the Advisory Group.</p>

We **reflected** continuously throughout the process, including with the Advisory Group – and these reflections shaped our ongoing **planning** and **facilitation**. This meant there was a very natural unfolding of the “way forward” we shared back with the community on our fourth trip that felt right to the group. As the way forward became clearer, we also engaged in ongoing **resourcing** to learn more about work we might draw inspiration or guidance from.

It could be argued that this “way forward” – an integrated family and child service model which centres around a playgroup, parent support, in-home culturally responsive learning resources, and job and training opportunities – was not innovative in that all elements already exist elsewhere.

We felt strongly that the purpose of this work was not to create wholly new things. Rather, the purpose was two-fold. Firstly, to build insight into what might help the community on Ngurupai to support their children to grow up strong and begin to understand what would be needed to make this real. Secondly, to support the community to build momentum for change needed for them to truly own the way forward.

We reached the end of this phase with an agreed shared way forward and with a community already taking tangible steps to make this real in the form of a monthly playgroup.

We believe our approach delivered on these objectives and that a similar approach could support other communities.

Finally, we also began **building for change** during this phase of the work to ensure we were working towards viable solutions that received both community and stakeholder support.

The line between **facilitation** and **building for change** was not always distinct, with our work with the Advisory Group serving both purposes. We also met with key local stakeholders who could function as partners or advocates for our efforts.

Closer to home, we also engaged an array of Goodstart experts with an array of skills to help us bring the next steps of the work to life through four sessions spread across the duration of the project.

Importantly, we maintained dialogue with key government stakeholders with an interest in the work. While much remains to be done, **building for change** was integral to our work whilst immersed in community.

Thus, during this period of the work, we found we were engaged in an iterative process of **planning, resourcing, recruiting, sensitising, facilitating, reflecting** and **building for change**. Our immersion in community created less separation in these steps than reported in the literature, and teams should expect to manage the contemporaneous dance between these activities and will need the skills and capacity to do so.

The following pages provide further detail, via a description of the tasks we engaged in during and between our four trips to Ngurupai.

Trip 1: Relationship building and yarning

Our first trip was the first time most of the team had visited the Torres Straits, so we had much to soak up and learn. We had planned for this trip to focus on relationship building with the Advisory Group and other local stakeholders. However, when we arrived, we discovered that the community was ready to yarn with us, necessitating a rapid pivot.

Preparing for the trip

Pla Organised ourselves for travel:

- Completed a risk assessment.
- Purchased comprehensive first aid supplies.
- Booked all flights and accommodation for the four trips, as well as the sports complex and hire-car on Ngurupai for the first trip.

Pla Prepared to meet people:

- Set up time with key stakeholders.
- Arranged time with and prepared questions for Advisory Group kick-off.
- Prepared our consent forms.

Res Continued to review the relevant literature on First Nations communities.

Legend

Pla	Planning
Res	Resourcing
Rec	Recruiting
Sen	Sensitising
Fac	Facilitating
Ref	Reflecting
Bui	Building for change



Reflections

Both Goodstart and Today had detailed risk assessment protocols. Completing this before our first trip felt challenging – for most of us Ngurupai felt very unknown, and for Peter who had lived in the Torres Straits for many years it felt as strange as completing a risk assessment for a trip to Melbourne or Sydney. After our first trip however, it was very clear what was important and what wasn't. Ultimately the two greatest risks we needed to pay attention to throughout the work was the risk of team burnout working in an isolated community at fast pace and the risk of bushfire – both things we had identified in the risk assessment.

There were limited accommodation options on Ngurupai, and we had to make some changes to our desired dates to secure this. Working in remote communities requires particular attention to advanced planning.

Goodstart and Today collaborated on the design of research consent forms, iterating to ensure they were accessible, noting that for some participants English is not their first language. This accessibility was something we needed to consider throughout our engagements, for example in written documents and the framing of questions.



On the trip

Bui Looked to meet with key stakeholders who could help welcome and orientate us to the community.

- Met with Ned David (Chairperson, Torres Strait Island Regional Education Council & Chairperson, Gur A Baradharaw Kod Torres Strait Sea and Land for the Torres Strait Islands) to understand history and context of education in the Torres Straits.
- Tried but failed to meet with Uncle Milton Savage (Chair of the Kaurareg Native Title Aboriginal Corporation) who was called away (the Kaurareg are the Ngurupai Traditional Owners).

Fac Began our community engagement:

- Met with the Advisory Group who shared with us their hopes for the community.
- Met individually with older Elders from the community who shared their stories of the past.
- Met - unexpectedly - with families.

Ref Debriefed and wrote-up our insights from each session.

Pla Purchased gift vouchers for the local supermarket as incentives for participating families.



Members of the Ngurupai Early Childhood Advisory Group



Reflections

Peter had already sought permission from Uncle Milton for us to undertake this work on Ngurupai in line with cultural protocols. We had planned to meet again with Uncle Milton as a team on our first trip so he could welcome us to Country, introduce us to local lore and share his perspectives, however he was called away on other business. Peter's groundwork meant we were able to continue our work on this occasion, however this increased our awareness of allowing generous time for connecting with key Elders who often have many demands on their time.

We were caught a little off guard by families ready to meet with us. We had not yet finished preparing our ethnographic questions, nor had we finalised plans for compensating families for their time. For some in the team, there was concern these initial engagements might be lower value or could mean we ran out of budget. However, we reached agreement that it was most important we worked with community rhythms, even if this impacted overall expenditure. We used our insights from these initial free-flowing yarns to shape guiding questions for our next trip.

Overall, we were overwhelmed by the positive reception we received in the community – a testament to the community's commitment to early learning and the groundwork laid by Peter on earlier visits. Without this, we could not have become immersed in the community so quickly.

Trip 2: Yarning

Our second trip continued our journey of getting to know the families of Ngurupai. We also went deeper with the Advisory Group.

Preparing for the trip

Ref Sense-making around our first trip:

- Finished documenting our insights from the previous trip – we were keen not to use computers for note-taking while meeting with families, but this had a consequence on time needed to keep on top of documentation.
- Collaboratively reflected on and synthesized our insights from trip 1.

Pla Prepared to yarn on our next trip:

- Amended our consent form to include contact details to support any follow-up.
- Developed a simple articulation of why we were conducting this work that we could all use.
- Developed questions for our next trip to guide engagement with families and the Advisory group.
- Developed three very low fidelity prototypes to explore early emerging ideas.

Pla Arranged logistics for the next trip, including:

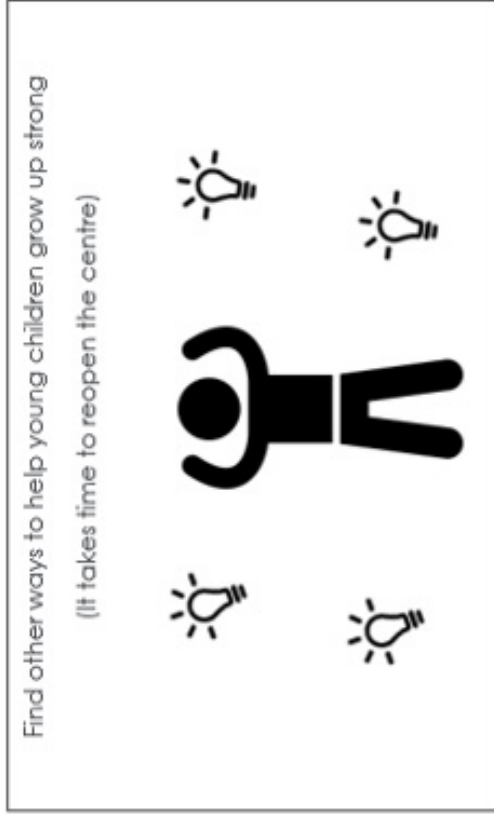
- Booked the sports complex and hire-car.
- Prepared a flyer advising when we'd be available at the sports complex.
- Liaised with the Advisory Group around when to meet next.
- Organised for better cameras to capture the process.

Reflections

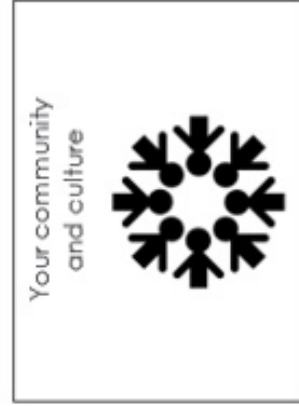
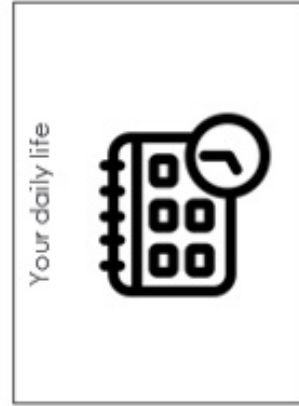
The time between trips was just about perfect for preparing for the next trip – except that we were also ramping up Stream 2 at the same time which meant everything felt tight and pressured. This juggle of the same core team members working simultaneously on both streams on tight time frames was challenging and impacted team wellbeing. Immersion in a remote community (especially for people new to this experience) is a full-time mental load, even when back at home between trips, and needs to be staffed as such.

Coordinating the logistics caused more headaches than we'd anticipated, simply because of the dependency between the pieces – for example, finalising the time to go on the flyer relied on ascertaining sports complex availability and agreeing both the design approach and sustainable working rhythms for the team. Such things seem trivial, yet we found could create pressure points when juggling many things at pace especially as we did not have anyone on the team dedicated to admin and logistics.

Hello! Goodstart have come to Ngurupai to work together with you to:



To learn how we can do this together, we would like to yam with you about things like:



Yarning about these things helps us all understand how we can help young children grow up strong. It also helps us learn how to talk with government and other partners to make things happen.

When you come and yam with us about your family, we would like to offer you a \$50 Ibis card to thank you for your time. Come and visit us at the Stadium between 2pm and 8pm on Wednesday 2nd, Thursday 3rd, Monday 7th or Tuesday 8th.

On the trip

Fac Continued to yarn with families:

- Met with many more families at the sports complex, drawing on the questions we had prepared to yarn with them about their lives.
- Evacuated from the sports complex due to bushfire.
- Hosted a Saturday night BBQ for families at our accommodation at Dugongs Rest, with thanks to the manager for allowing this.
- Attended a Blue Light disco at the primary school to socialise with the community at their invitation.

Rec Recruited more families at the playground and supermarket, and via community facebook page.

Fac Met twice with the Advisory Group:

- To talk more about their hopes for this work and test with them our initial three low fidelity prototypes.
- To capture their reflections on past early childhood services on the island – why these had thrived and why they had ended.

Bui Met with team at Mura Kosker, a local Community Controlled Organisation (CCO) on Thursday Island and potential partner for future work on Ngurupai.

Ref Shared the story of the work we were part of:

- Wrote an article for The Torres News newspaper.
- Spoke on the local radio station TSIMA radio 4MW.
- Continued to debrief, write-up and synthesise insights.



Reflections

With families, we primarily focused on continuing to learn about their stories, their daily life, the hopes and dreams they held for their children, and their community and culture. We used the questions we had prepared as a loose guide, following the directions the conversations took us in the spirit of privileging the stories people want to share. When we reflected, we found we had rich insights into moments of significance in people's lives and the things they valued or feared, but less detail on the ins-and-outs of how people spent their days. This gap was compounded by our decision (on Peter's guidance) not to ask if we could shadow people in and around their homes. As we continued to develop possible ideas on future trips, we realised we needed to be careful to recognise what we didn't know and avoid filling in the gaps with assumptions.

One of the members of the Advisory Group suggested we host a Saturday night BBQ. Here, we connected with families we hadn't seen before at the sports complex. The Advisory Group shared that community events were a good way to engage people in a less intimidating way and build momentum. Yarning with families in the semi-dark while preparing food, playing with children and photographing the experience stretched our abilities as researchers but was critical in engaging a broader array of families.





We had prepared three low fidelity prototypes in the format of very short newspaper stories with the intent of testing the water around three very early emerging high-level ideas. Our experience with these was mixed. Firstly, we had to build shared understanding within our team around their purpose (to support further learning about community needs). Specialised design language such as “prototypes” created barriers to mutual understanding and had to be worked through. Then the format was unfamiliar for families, many of whom didn’t easily engage with them. Finally, with the Advisory Group they opened up fabulous conversation, as we considered the three ideas together from various angles. This was pivotal in broadening the dialogue with the Advisory Group from a focus on reopening the centre to an exploration of other ways they might realise their aspirations for young children to grow up strong. Evolving our approach as we grew to better understand the different people we were working with was key.

Twice, we facilitated an activity to help us learn from the history of early childhood services on Ngurupai – on trip two with the Advisory Group and on trip three with older Elders who had been instrumental in setting up past services. This was a critical activity for two reasons. Firstly, there were incredibly rich learnings from the past that will enable the success of future offers. Secondly, this activity helped the Advisory Group and older Elders to situate the work we were now doing within their longer journey in a way that helped strengthen commitment for current efforts.

On this trip we also met with Mura Kosker for the first time, a well-respected Community Controlled Organisation (CCO) based on nearby Waiben (Thursday Island) who offer a variety of child and family services, including a playgroup. Partnering with an Community Controlled Organisation is essential for ensuring community governance of any future service offers, and our conversations with Mura Kosker (as one potential partner) showed the value of conducting these conversations face-to-face.

Trip 3: Prototyping

Our third trip was ambitious, as we sought to shift fully into prototyping with the community. Conscious of our experience with prototyping on our second trip, we knew we needed to find ways to make this meaningful and accessible to the community.

Preparing for the trip

Our third trip followed very closely on the heels of our second – after allowing for travel, weekends and time-in-lieu, there were few workdays between the two trips. To accommodate for this, the first two days of our time in Ngurupai were scheduled to focus on preparing together for the rest of the trip. However, as we arrived at Cairns airport – some of us from Melbourne and some from Cairns – we were greeted with the news that all flights were to be cancelled due to a bushfire on the island that was causing significant smoke pollution. We pivoted to work out of the Goodstart Cairns office for the next 3 days until we could fly (safely) to Ngurupai. During this time, we:

Ref Prepared to share insights with the Advisory Group:

- Unpacked and summarized our insights from the first two trips.
- Selected and printed more photos to share back.

Pla Prepared for a community BBQ focused on prototyping with families:

- Mapped out a draft theory of change to guide prototyping.
- Explored a variety of ways we might paper prototype ideas with families, before landing on a card sorting method to visually consider various dimensions of possible service offers.
- Purchased learning resources for a live playgroup prototype.
- Planned for BBQ including priorities, roles and logistics.
- Found and booked a local videographer for the BBQ.



Reflections

The delayed flight turned out to be a blessing in disguise for this step of the process. We were more settled and focused in the Cairns office, knowing our attention was fully dedicated to the process of synthesis and planning. Access to simple things like reliable internet and a printer made a big difference to our efficiency. We also observed that being away from home in a large city felt very different to being away from home on a remote island, and our time in Cairns created a moment for recuperation even as we continued to work hard. We reflected that being embedded in community was critical, but that time away together as a team was very valuable as well.

When we reflected on our early attempts at prototyping on our last visit, we noticed that although the prototypes we had designed were not suitable for families to easily engage in, families were able to use them to point to ideas they liked. As we thought about the most accessible way to explore possible service models with families, we decided on a card sorting activity. Groups of cards each represented possible variations on a particular element of the service – for example, who this was for, who delivered this, where was this delivered, what frequency and time was this delivered, and what were the benefits of this. The activity was designed for families to consider each element in turn, select the cards that felt important or relevant to them, and talk – as much as or little as they liked – about why they had chosen these cards.

We realised we had grand ambitions for the community BBQ, but when we laid these out we realised we would be constrained by our resources on the ground – and unlike work in our hometowns, we couldn't call on other colleagues at short notice. Although a community BBQ had initially been suggested by the Advisory Group and they were very supportive of the event, we had not planned for the time to work with them in ways that would allow them to lead the various codesign activities. We therefore simplified our plan (dropping some creative arts-based story-telling activities), assigned roles within our team, and agreed what we were willing to sacrifice on the day if necessary.



On the trip

Fac Met with the Advisory Group to review and interpret insights together.

Fac Made ourselves available to meet more families on Friday (none came)

Rec Invited families to the BBQ through community Facebook page, a flyer in the supermarket, flyers handed out at the school, and via Advisory Group connections.

Fac Hosted a Saturday community BBQ at which we:

- Ran a live prototype of a playgroup.
- Engaged families 1-on-1 in our card sorting prototyping activity.
- Yarned informally with community members.
- Captured video footage (hiring a local videographer).
- Served lunch (with thanks to the community members who supplied the BBQ and cooked all the sausages).

Fac Met again with some of the Advisory Group to reflect on what we had learnt during our community BBQ.

Fac Met with the older Elders as a group to capture their wisdom from establishing and operating past early childhood services on Ngurupai.





Reflections

To foster ownership and deepen interpretation and relevancy of insights, we shared emerging insights back with the Advisory Group at the start of this trip. Our initial interpretation of insights was imperfect, but they acted as an important prompt for deeper interrogation. From this session, we were able to articulate the community's story in a way that resonated strongly (this was shared back on our final trip).

We started this session by presenting our insights to the Advisory Group. On reflection however this was a lot of information to receive at once, which made it harder for some participants to enter the conversation at first. Later we shared these insights with the older Elders, allowing them the time to first explore them on the wall at their own pace. This was more accessible.





On the day before the BBQ we were committed to being at the sports complex for families to drop-in, and we also needed to head over the Thursday Island to shop, prepare food for the BBQ, get ready for the live prototype, handwrite invitations to be handed out at the school, sort out an issue with obtaining more gift cards to thank participants, and juggle pressing work for the other stream. With everyone very aware of the importance of the following day, this was a real pressure point. The BBQ was a critical part of our work with the community, and in future we would plan for two-three days of preparation free of other commitments (recognising of course this could still be disrupted by unexpected events).

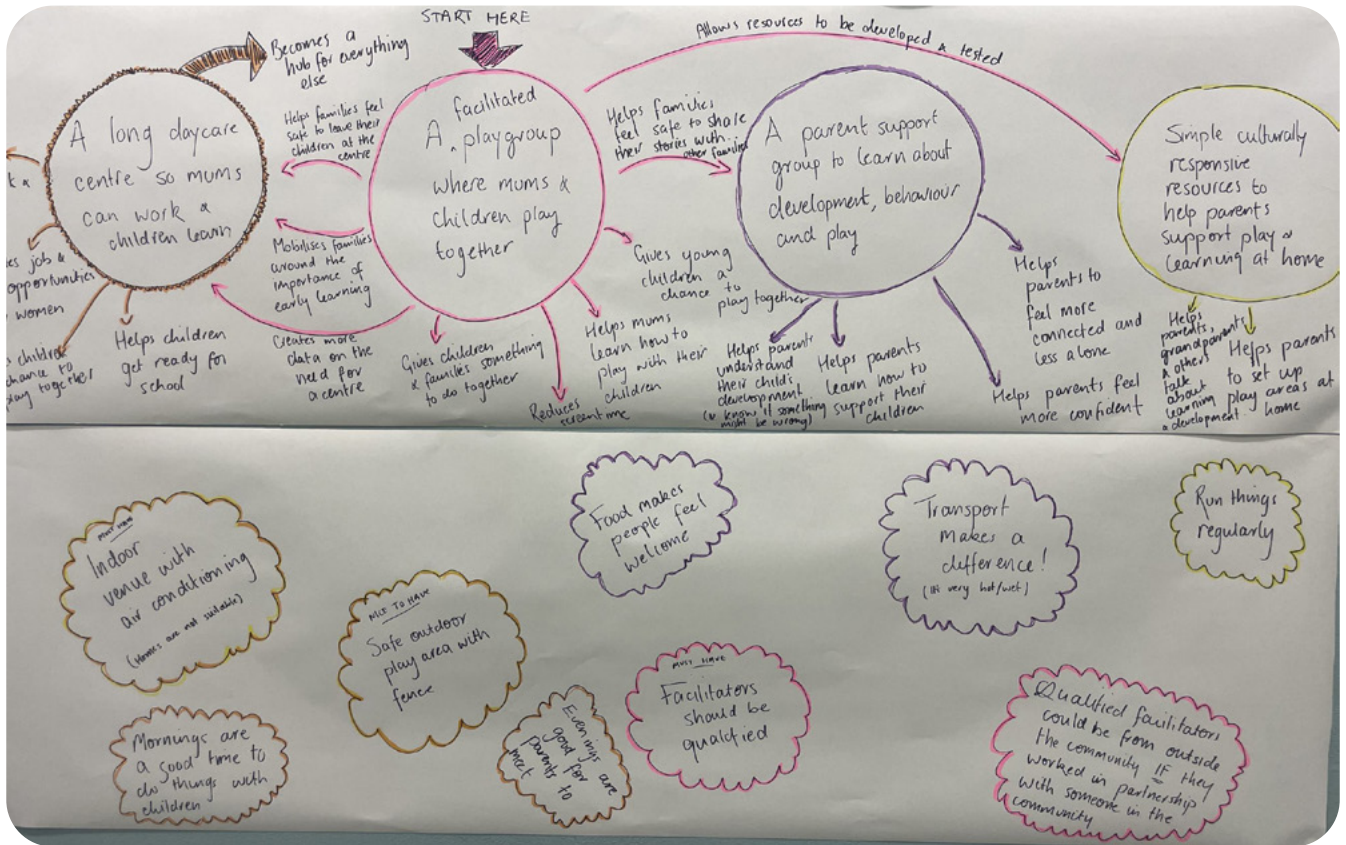
This was an incredibly powerful day. Children of all ages as well as parents and carers actively participated in the live playgroup prototype, exploring the varying resources and reflecting on their own experiences of both learning and parenting. Families agreed to participate in our card sorting activity, sharing rich insights (sometimes in Creole). We had set up a back room at the sports complex for this prototyping but found ourselves often doing it on our laps amidst the noise of the playgroup. Food was enjoyed and the playground hummed with children at play despite the 34-degree heat. In the days after the playgroup as we visited the local supermarket or strolled around the town, we found people who hadn't attended asking us about it. The sense of community interest in and commitment to early learning was rising.



Magi our Torres Strait Islander educator conducting the card sorting activity with a mother in Creole. Magi's role was critical throughout in helping us connect with families in ways that resonated with them, in Creole and in English.

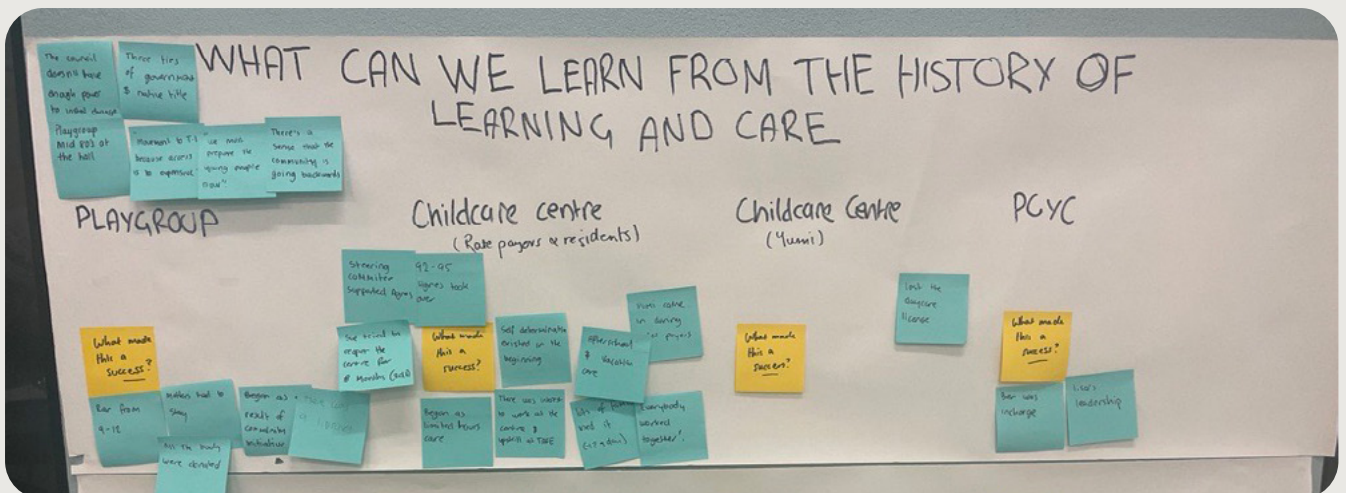
One of the mothers who participated in the card sorting with the cards she chose and two of her children.





We held another session with the Advisory Group in the days following the BBQ. To prepare for this, we rapidly synthesised insights from our weekend prototyping to create a rough hand-drawn vision for the future early learning ecosystem on Ngurupai. Although rough, this played a critical role in setting up for our fourth trip, as the initial reflections of the Advisory Group both shaped the artefacts we brought back on the final trip and primed the Advisory Group to engage in these.

The older Elders in the community had a wealth of wisdom from their past experiences of establishing and operating services on Ngurupai. We had met with these pioneering women individually on our first trip when we knew very little about the history of the community. Now we met with them again in a group, to learn from their experiences. As they reflected today on the past, incredibly important insights emerged to guide the way forward. Refer to section 'Drawing lessons from the past' in our companion document 'Remote Access Matters' for detail on these insights.



Trip 4: Prototyping and planning

Our final trip (for this phase of the work) centred around testing how everything was coming together with the Early Childhood Advisory Group, to ensure co-ownership of the proposed way forward. Excitingly, the Advisory Group also made – and then actioned – a tangible plan to start with a monthly playgroup in the new year to ensure momentum was not lost.

Preparing for the trip

Pla Prepared for a half-day workshop with the Advisory Group including:

- Synthesised all insights gathered to date to create a series of artefacts that brought together the proposed way forward.
- Selected and printed artefacts and more photos.
- Designed the workshop agenda.

Pla Bought gifts for the Advisory Group to thank them for their guidance.

Bui Tried to get more time with Mura Kosker however diaries did not align.

Key reflections

The turn-around between trip 3 and 4 was very tight, and many of the team were focused on the other stream. Seven workshop artefacts (shown below and on the following pages) were prepared before the workshop agenda in a reversal of standard practice to allow time for printing – even so, long negotiations were held with Officeworks to get everything printed on time. Printing windows need to be allowed for – particularly when oversized printing is anticipated.

What is our story

On the island of Ngurupai in the Torres Straits, families, elders and educators share a hope: for their young children to be part of a thriving community that works together to give them great life and career opportunities.

The community has fought hard for their children. In the 1980s and 1990s they opened a playgroup, a childcare centre, and a school. But today, only the school remains, along with 15 hours of kindergarten for children in the year before school. There are no other services on the island to support young children's learning, to provide care so that families can work, or to help parents learn how they can support their children's development and behaviour (except for basic services at the health clinic). With poor access to services, families do not always know when or how to seek help.

Most social, healthcare, aged care, education and employment services are on Waiben (Thursday Island) – including the only nearby long day care centre which has a year long waitlist. Travelling across by ferry is expensive, unreliable and sometimes dangerous; many people travel by dinghy instead if they can access one. A new affordable housing development will double the number of houses on the island over the coming years, adding further pressure to already stretched services, including the ferry.

There are also few opportunities on the island for children and families to come together. The weather is increasingly hot with heavy rain in the monsoon season, making outdoor gatherings hard. There are no lights in outdoor spaces, limiting gatherings in the cooler evenings. The only playground is unfenced and in urgent need of repair. There is no affordable indoor public gathering space – and restrictions on the way the sports complex can be used if this is hired. Homelessness and overcrowding make it difficult to gather in people's homes.

The land and sea provide rich opportunities for fishing, swimming and crabbing – and young children often follow their big brothers, sisters and cousins out to play and explore. However, teenagers often get bored and restless, making drinking and vandalism common. Families have limited money to spend on social activities, even if there was somewhere to spend it. The cost of living is very high – both housing and food are incredibly expensive. Many dads spend the weekend hunting to help provide enough for the family. Some families feel trapped and are looking for ways to leave the island for better opportunities for them and their children.

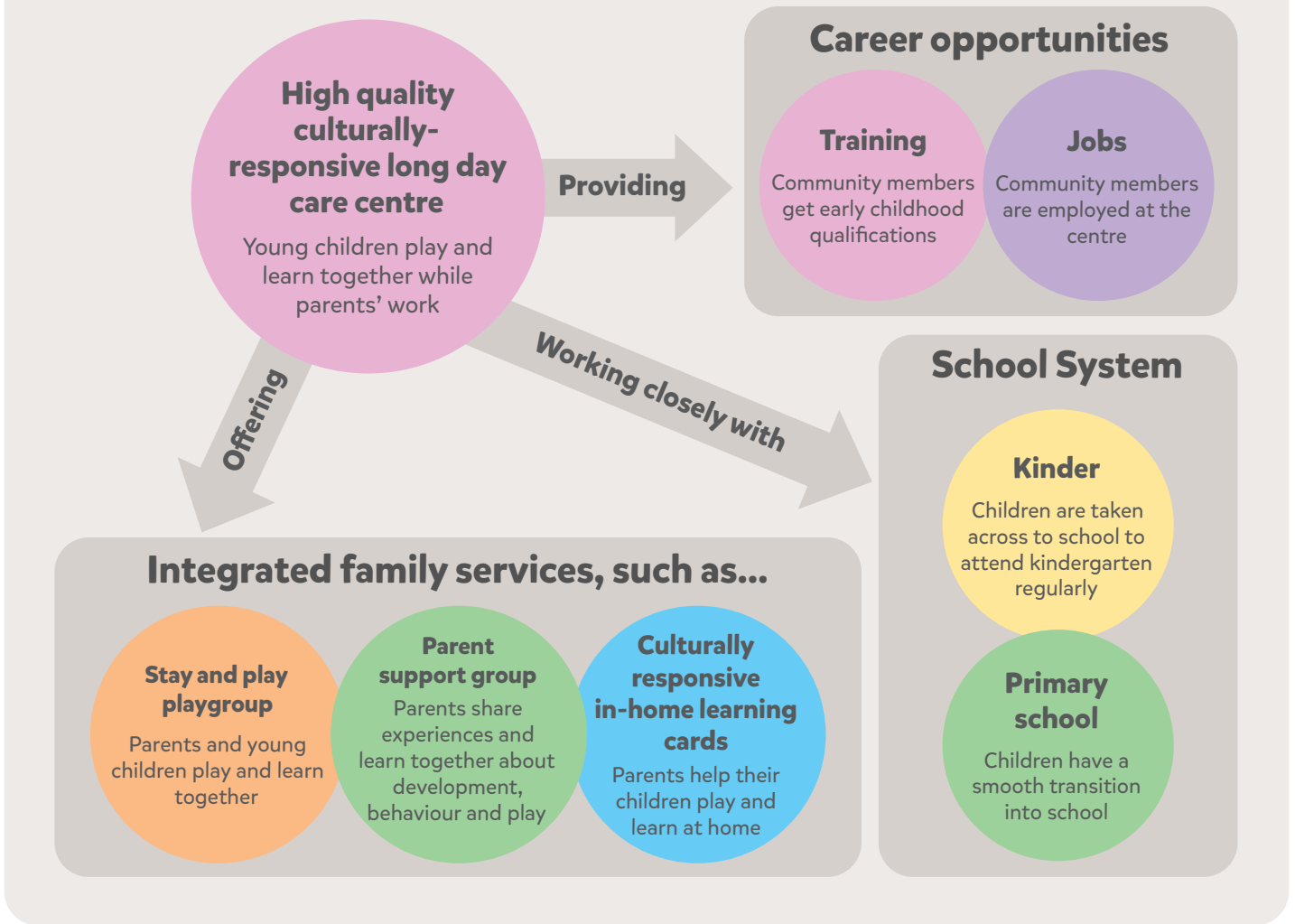
Ngurupai is a “melting pot”, with people from all across the Torres Strait – and beyond – including the traditional owners the Kaurareg people. People have different reasons for choosing to live on Ngurupai.

Some people grew up there or returned for family reasons. Others want to work on nearby Waiben where housing is also scarce. For the Kaurareg people it is their traditional land.

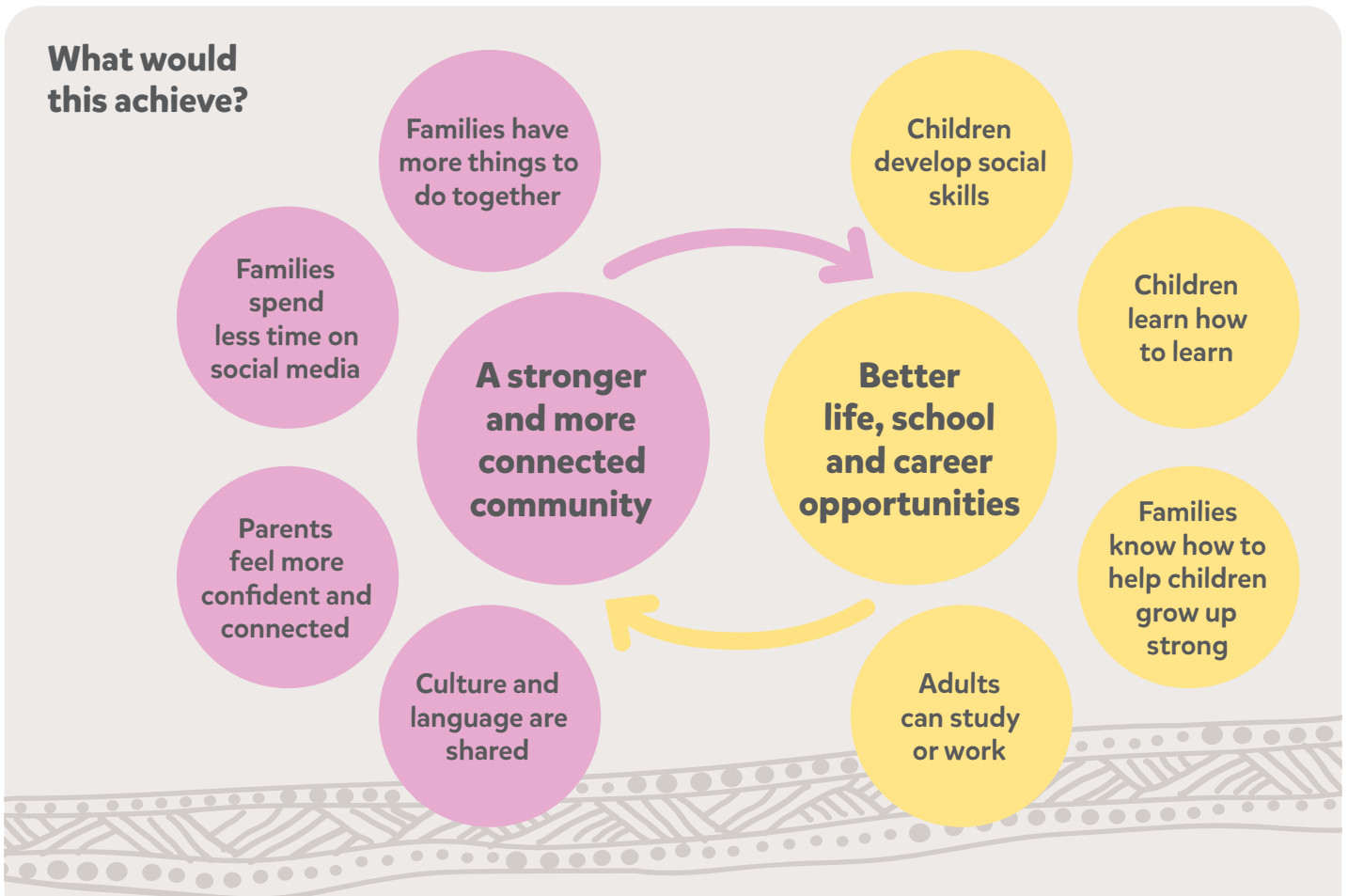
Many people describe Ngurupai as a friendly community, and family groups are strong. Some community members are working hard to pass on traditions. Yet, the diversity on the island means there is not a single shared culture that brings people together. The rapid rise of social media has also pulled people away from community life – and away from Australian, Aboriginal and Torres Strait Islander culture. Aunties and grandmothers of young children are busy working themselves. Many people say the community is not as connected as it was in the past, or as it is on other islands in the Torres Straits. Parents – particularly young parents – often feel unsure how to best support their children to grow up strong.

In the face of these challenges, the community is once again rising up. They are coming together to imagine what the future could look like for the young children of Ngurupai. A future where young children are part of a thriving community that works together to give them great life and career opportunities. The long day care centre building is still standing, carefully cared for by the community. Eight early childhood educators and teachers live on the island. The time for change on Ngurupai is now.

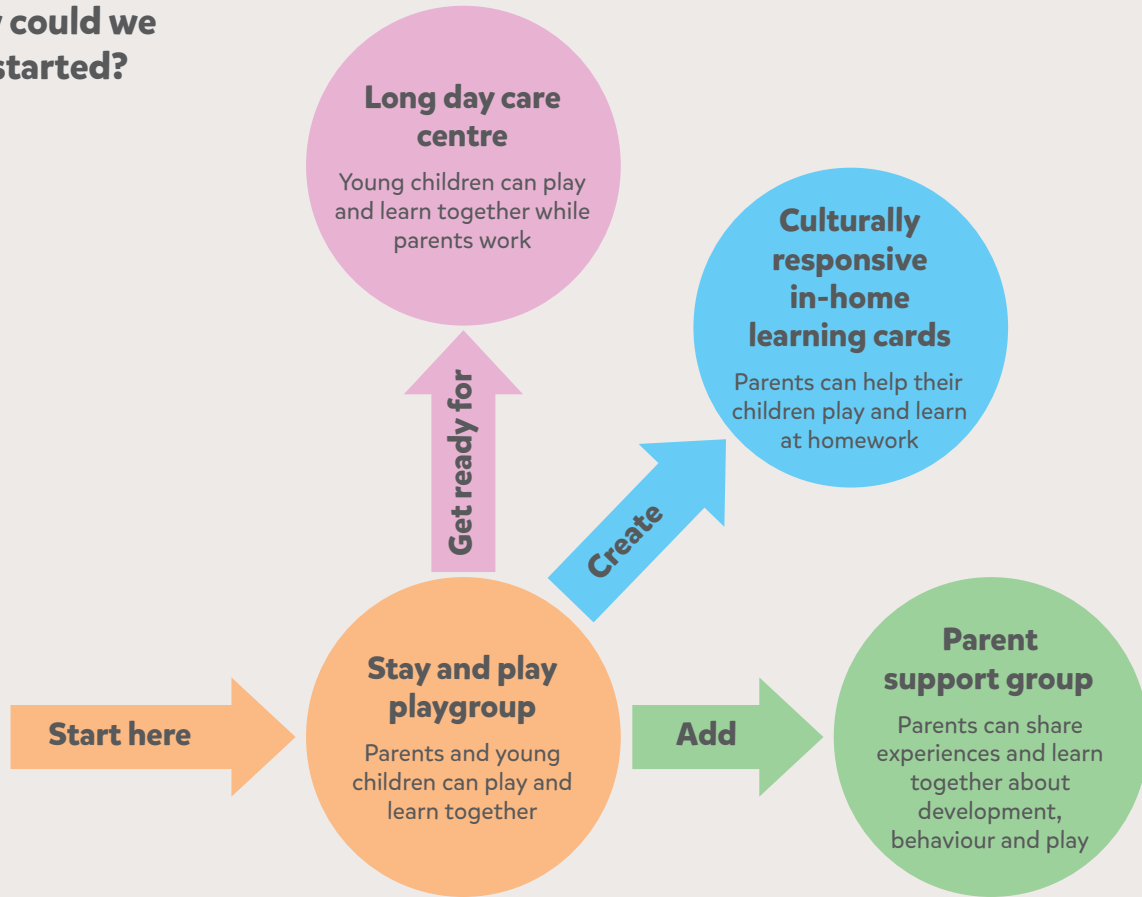
What might the future look like?



What would this achieve?



How could we get started?



Why start with playgroup?

There's a lot of energy around the idea of a playgroup...



What do we need to make a playgroup happen?

Agreed days and times to run

Most families tell us mornings ~3 times per week for 2-4 hours would be good

Access to a suitable airconditioned indoor space

And ideally, a fenced outdoor play area

Qualified educator(s)

Ideally from within the community

Transport

To get to and from the playgroup

Learning resources and food

And somewhere to store them

Funding

To cover all costs

A community-controlled organisation

To run it locally

Friends with influence

To help make it happen

Other support from Goodstart?

For example, to generate evidence of impact

What could culturally responsive in-home learning cards look like?

Wata plei Water play



Wanem po mekem:

Yu go need smol tray po wata, den put'eh wata insid lo dah tray. ip yu wandem yu can add food colouring po makeh da wata colour. Den yu can just add dem sea animal insid da wata po yu pikinin po plei.
If yu wandem yu can even tekeh prapa seaweed and puttim insid just so yu pikinin can lok wisint prapa seaweed lok lik and experience that feelin blo that prapa seaweed.
Yu can also add'eh other things to like san or leaves kusa for makeh dat sensory feeling po pikinin po plei.

Pleido Playdough



Wanem po mekem:

1 cup salt
3 cups plain flour
60ml vegetable oil
food colouring
250ml (1 cup) warm water
Yu go mix ol dem dry ingredients insid bowl den wen yu pinis mi'em, yu add dah oil insid dah bowl, and stir'em togetha.
Yu go add any color insid dah warm water. Den apta yu go slowly add dah wata go insid po dah bowl and mi'em till e go come rite po yu po knead'im por makeh dah pleido yu wandem.

Drawing Drawing



Wanem po mekem:

Blank paper and sum crayon, colouring pencil or oil pastel po pikinin po drawing and show'eh thempla creative skills ol gat.
E gud po pikinin po use thempla imagination wen ol draw coz upla stap lo beautiful lan and ol hin beautiful things e surround upla.

Culturally responsive in-home learning cards

Parents can help their children play and learn at home

- Popular learning activities turned into cards for families to use at home
- Local educators (and families) help provide Kaurareg and Torres Strait Islander "flavour" (style, language, content, ways of knowing)
- Cards written in Kriol, Kaurareg and English
- Resources could be provided or loaned by the playgroup/centre



On the trip

- Fac** Ran a workshop for the Advisory Group to decide the way forward together.
- Bui** Hosted a dinner to thank the Advisory Group for their welcome and guidance.



Reflections

Learning from our previous trips, we allowed a full clear day together in Ngurupai before our final workshop. This was valuable because it allowed us to get very clear as a team about how we wanted the session to work and to rehearse the roles we would play. This enabled all team members to play an active and important role on the day.

The workshop was attended by Advisory Group members, as well as several other members of the community they invited in order to build greater momentum and buy-in. Some Advisory Group members were unable to attend the full workshop, but dropped in at the end or joined us for dinner – we observed group members who had attended the workshop share the workshop artefacts (we had produced two printed folders of these, as well as the large posters) with other others, taking ownership of the way forward. This felt like testament both to the strength of the community and also to the openness of process and relationships over our four trips that meant people felt comfortable to own and trust the direction.

During the session, we allowed ample time for people to roam the room, taking time to digest the posters at their own pace. We stationed ourselves flexibly across the space, to provide voiceover to the posters as needed and to yarn with participants about their reflections. Reflections were captured on post-it notes which were then used to iterate the artefacts. After participants had time to sense-make around the content at their own pace, we yarned together as a group about what all this was telling us. This worked better than when we had started by presenting content in our third trip.

Importantly, as the group discussed the idea of starting with a playgroup, the dialogue started to shift as the community started to explore how they could take tangible action straight away without waiting for further funding. Quickly, the idea of a once-a-month playgroup began to take form, with participants volunteering to take a day off work to run the session. A date about six weeks away in late January to align with the start of the school year was set. From this, we started to map out a timeline together on the wall, starting with the monthly playgroup and stretching forward over the next three years. The community was moving to action.

Our CEO, Julia Davison, joined us in Ngurupai for this final workshop – a very powerful signal of our commitment to this work. This also meant that when the community committed to a monthly playgroup, Julia was able to immediately offer to help resource the community to run this over the next twelve months – including learning resources (books, toys, etc), a Torres Strait educator to help plan and facilitate the sessions, and funding to secure space and food.

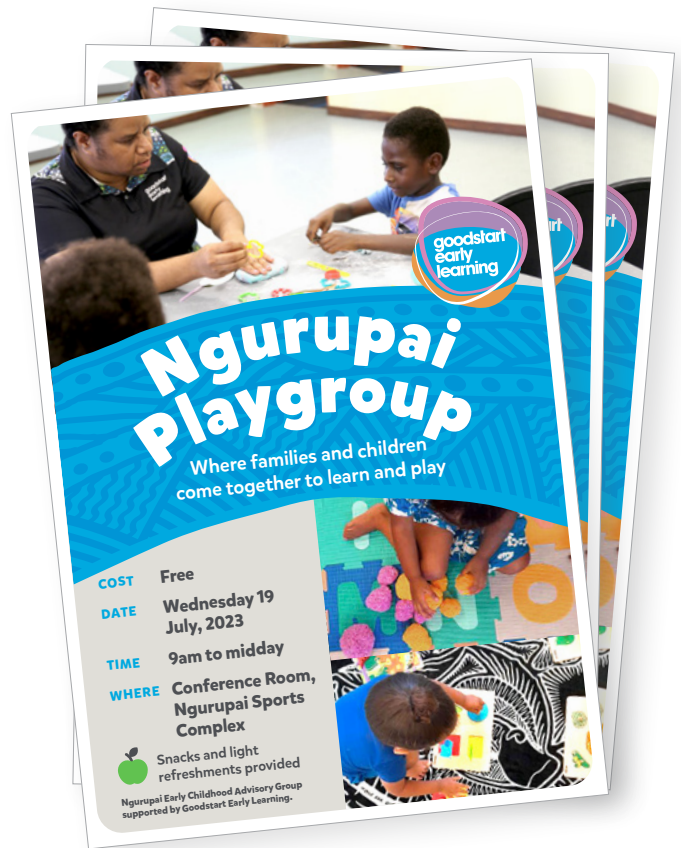
At our final dinner, the members of the Advisory Group commented on the value of having Magi, our Torres Strait educator seconded to the project, as part of this work. Not only had Magi helped families to feel more comfortable to engage with us, including conducting sessions in Creole with some families, she had also been an inspiration to other young women in the community who in seeing Magi's career began to imagine their own. This speaks to the multifaceted value of creating opportunities for people who are part of a broader community to help lead change within the community.



Building for change (2C)

On our fourth trip, the Early Childhood Advisory Group moved to tangible action by deciding to start a monthly playgroup whilst further funding was sought to take other ideas forward. With our CEO in attendance at this session, we were able to commit on-the-spot to resourcing this playgroup over the next twelve months including monthly trips from Peter and Magi to facilitate the playgroup and build ongoing momentum in the community around the bigger vision.

Six playgroups have been held as of the writing of this report (June 2023), and the playgroup itself has become an important vehicle for **building for change** as community members have seen and yarned about the value of early learning.



We have also continued to meet face-to-face with various local stakeholder groups and organisations to plan next steps, including working to forge the partnerships necessary to establish a sustainable service model with local governance. Maintaining momentum with this work after the initial codesign phase has been critical for continuing to strengthen trust with the local community. Peter, Magi, Amanda and Kylie have continued to be a consistent presence in Ngurupai, nurturing the relationships established through the initial project and progressing what was started. Many community members have commented that this shows our ongoing commitment to the children and families of Ngurupai, where others in the past may have simply come and never returned.

Finally, our ongoing trips have also supported the beginnings of conversations with other Torres Strait Island communities. Our work with the Ngurupai community has led other communities to express interest in undertaking similar work with us. In this way, our ongoing presence on Ngurupai is **building for change** across the Torres Straits.

This highlights the importance of ongoing presence in community to ensure initial codesign work translates into sustainable – and scalable – impact.



Stream 2: Grant Funded Project (3)

How can in-home learning be supported in remote communities – and specifically, what is the role of digital technologies?

Team preparations (3A)

We commenced **planning** for Stream 2 at the same time as for Stream 1. Almost immediately we encountered a significant challenge with **recruiting**. One purported advantage of virtual codesign is that it widens the pool of possible participants by eliminating barriers of geography and reducing the ask of participants by eliminating travel time (Constantin et al., 2021; Kennedy et al., 2021). However, we found it challenging to recruit families despite a generous financial incentive.

We tried:

- **Employee recommendations:** We asked our 500 Goodstart head office staff for possible warm connections to communities or individuals but did not obtain any suitable leads. We also spoke with Centre Directors of centres in regional Queensland with a similar lack of success (noting we were seeking families in areas without access to long day care services).
- **Warm contacts:** We reached out to contacts in service providers working in regional Queensland to explore if they had distribution channels we might leverage. We found our planned timelines were too tight for building the deeper relationships and shared agenda needed for such partnerships.
- **External recruitment agencies:** When we spoke with external recruitment agencies, they advised us against paying for their services as they had poor representation of our target population on their books.
- **Facebook and Instagram ads targeted at our desired communities:** We did not receive any relevant responses from these.



Instagram advertisement

- **Cold calls:** We reached out to councils and schools in townships with the desired demographics. Several offered to place a recruitment invitation in their local newsletter.

It was through our cold calls that we finally found success. In a township in remote Western Queensland, one particular community member with a leadership role in education and new baby promoted the project in the community. Eight mothers with young children followed the sign-up link, consented and participated in the work with us.

Recruiting approaches that have been successful for others in the literature include:

- Snowball recruiting starting with known contacts (Savoy et al., 2022).
- Partnerships with organisations that hold contact details and have distribution channels for the target population (Kennedy et al., 2021).
- Establishing a trusted presence over the course of a year in Facebook groups for people in the target population (MacLeod et al., 2017).

Teams considering virtual approaches should allow for an extended relationship building period upfront (either with target populations or suitable partner organisations) to enable successful recruitment of participants especially when working with hard-to-reach populations.

There were four flow-on effects from our challenges with **recruiting**:

1. We had hoped to target 12-15 participants, but ultimately recruited 8.
2. We had hoped to work with participants from multiple communities, but ultimately focused on one.
3. We had to delay our first virtual engagement with families by several weeks which compressed later timelines.
4. We had to delay much of our research (**resourcing**) to pivot to recruitment efforts.

There was a second important limitation to our approach to recruiting. The township from which we recruited mothers has a significant Aboriginal population, yet our approach did not reach these communities at all (one respondent identified as Aboriginal or Torres Strait Islander, however, did not speak of herself as part of a local community).

Others have raised the equity challenges that virtual approaches might present, where marginalised groups are further excluded either through lack of digital access/literacy or through the absence of trusted relationships with project teams (Beresford et al., 2021; Fouqueray et al., 2023; Mallakin et al., 2023). One person we spoke to who had worked with the local Aboriginal community shared her perspective of the importance of building on-the-ground relationships in line with local lore.

We recommend teams consider carefully who may be marginalised by a virtual approach and what work is needed to ensure marginalised groups are not further excluded.

Despite our recruiting delays, we did commence **resourcing** during this preparatory phase with an emphasis on engaging with key Goodstart experts to deepen team understanding of the question to be answered through this work. However, our work to understand the remote Queensland early childhood landscape through desktop review and dialogue with service providers ultimately extended throughout the whole (virtual) engagement period. Which meant we brought these insights into our reflections at the end of our virtual engagement with families, instead of using them to help inform our virtual engagement. This was workable but not ideal. We advise teams to allow dedicate time and capacity for **resourcing** both at the front end and throughout the project.

Virtual engagement 1: 27-28 October (3B)

Our virtual engagement commenced with **sensitising** with a semi-structured introductory interview with each participant. Each interview was conducted over Microsoft Teams by three members of the team – one who led the interview, one who captured notes in Miro and one with experience of early childhood education in remote communities who observed in order to aid later interpretation of insights. The interview was aimed at fostering trust, orientating participants to the upcoming design research process, and help them to start reflecting. It also helped us get a sense of each participant, which aided in the interpretation of subsequent insights.

Introductions

- Introduce the team
- Walk through consent form / answer questions

Their motivations

- Why are they interested in participating
- What are they hoping to get out of the experience

Their time commitments

- Their commitments (e.g. work, volunteering, caretaking)
- Their working schedules (if applicable)
- Who they have caregiving responsibilities for

Their caregiving network

- How they currently access early childhood education and care
- Who/what supports them to take care of their family

Community perceptions

- What they love about living in their community
- What do they find challenging about living in their community
- What makes them feel close to their community
- What brings the community together

Research instructions

- Walk through an activity – including testing Airtable link and emailing photos/videos
- Provide contact phone and email for support
- Outline time commitment, including plan for each day

Questions

- Any questions or concerns

Warm-up interview structure

Following our warm-up interviews, the team members involved in these calls reflected on what they had learnt, and then shared these reflections with the broader team. One member of the team had significant experience working with remote communities in the early childhood space, and other team members found this perspective very important in contextualizing the insights. We recommend team composition considers understanding of the system to be designed within and for.

Virtual engagement 2: 29 October - 4 November (3B)

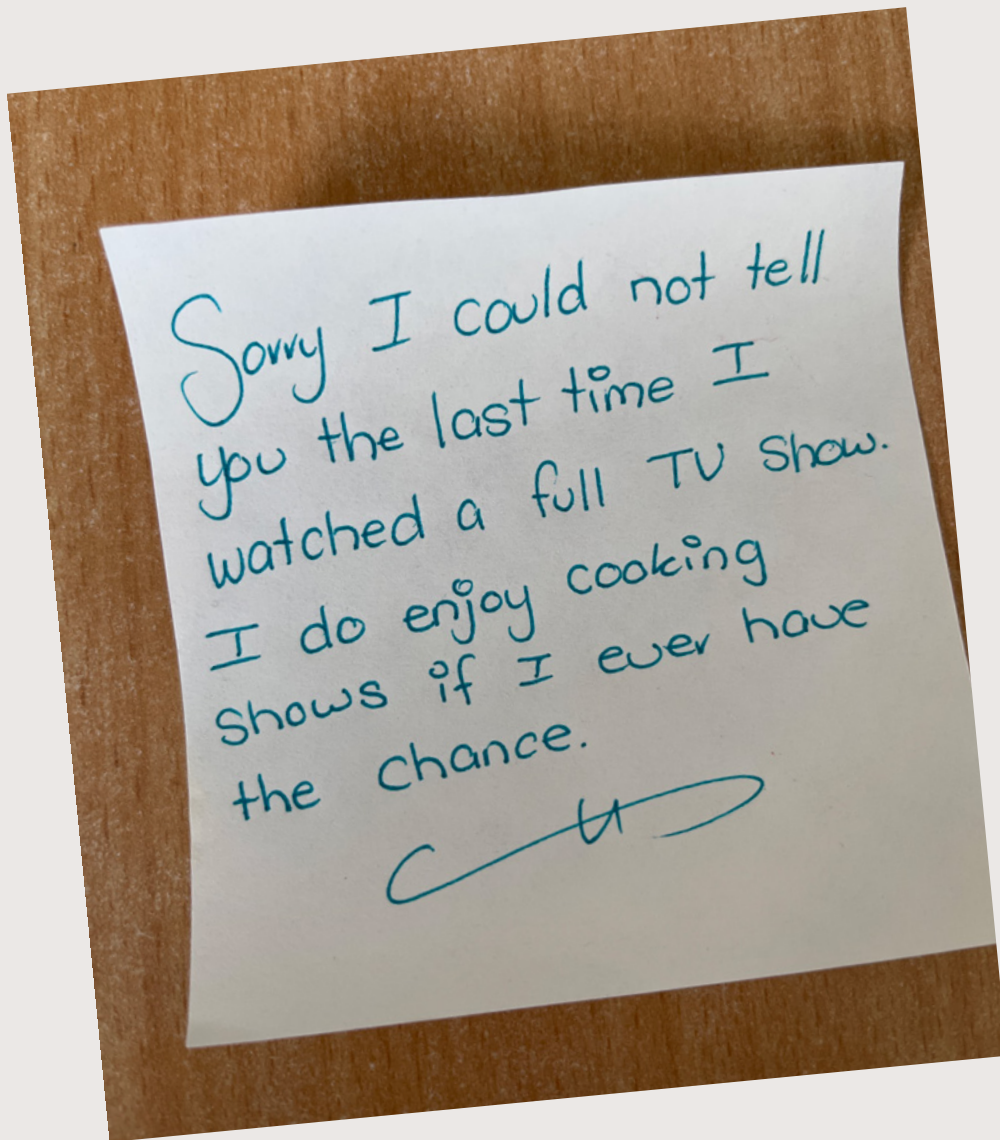
After the warm-up interviews, for our second virtual engagement we **facilitated** a four-day period of asynchronous research (this was extended to six days to give participants time to complete the tasks). Asynchronous research methods (that is, research methods where questions are asked by the researcher and answered by the participant at different points in time) have been shown to generate less text but an equal number of insights compared to synchronous methods (Bowden & Galindo-Gonzalez, 2015; Constantin et al., 2021; Dimond et al., 2012). This was an intentional medium to enable participants to keep longitudinal records of their day-to-day, establish a basis for contextual enquiry and understand participants' digital behaviours. As a light form of auto-ethnography, it allowed us to gather data from the participants without the interference of a researcher in the room. Each day participants were emailed a new set of prompts to complete, asking them to reflect on different aspects of their lives.

		Objectives	Format	Tech
DAY 1	Activity 1	Get to know you <ul style="list-style-type: none"> About you Your values Your family Your community 	Open text	Airable
	Activity 2	A day in your life <ul style="list-style-type: none"> Your typical weekday 	Photo and video capture	Camera/MMS
DAY 2	Activity 3	Your care and support network <ul style="list-style-type: none"> For your family For your children Challenges The support you need 	Open text	Airable
	Activity 4	Your child's education journey <ul style="list-style-type: none"> Education journey Challenges The support you need 	Open text	Airable
DAY 3	Activity 5	Mindsets and aspirations <ul style="list-style-type: none"> Hopes and fears for your children Hopes and fears for your community Mindsets on education and care Your own experience of early childhood education 	Open text	Airable
	Activity 6	Norms and behaviours <ul style="list-style-type: none"> Identifying states in your child Activities they engage in Your experiences with your children 	Open text	Airable
DAY 4	Activity 7	Goodstart@Home platform <ul style="list-style-type: none"> First impressions Features Last impressions Other digital products 	User test of current platform Open text and Likehert scale	Airable
	Activity 8	Emotional association of early education and care <ul style="list-style-type: none"> Create something that represents a positive experience with your children 	Digital probe	Home resources/ camera/MMS

Our **facilitation** of a virtual asynchronous research approach was successful in gathering a breadth of data as hoped. However, when reflecting in retrospect we felt that other virtual design approaches could have been incorporated or enhanced for even richer insights, such as:

- **Diary study** (Hall et al., 2021; Hillman et al., 2015; MacLeod et al., 2017). This asks people to capture information about things they are doing or thinking in the flow of their daily activities, helping to surface insights in context. Participant reflections may be triggered by events in their life (for example, going outside with their child) or by digital reminders (for example, text messages throughout the day that ask about what is happening at that time). We asked participants to tell us about a ‘typical day’ when deeper and more contextualized insights could have been gain by prompting them about key aspects of ‘this day’ throughout the research period.
- **Digital probes** (Constantin et al., 2021; Fails et al., 2022; Hall et al., 2021; Mallakin et al., 2023). These provide participants with creative prompts to stimulate them to think about their experiences and perspectives from different angles, and to share these in different ways. Participants may be sent physical materials to use, may be asked to use materials they have around the house, or may create fully digital responses. We utilised one digital probe for the final activity, however, would have gained richer insights if we had also asked participants to tell us about their creation.
- **Photovoice methodologies** (Hall et al., 2021; Liegghio & Caragata, 2021). These ask participants to not only capture photos or videos, but also to share their own interpretation around what these mean. We used photo as a data capture methodology, and while these provided insights into people’s lives we would have gained deeper insight had we also asked participants to share why this image was important to them. We also found mothers sometimes shared images from the internet rather than their own lives which is important to be aware of both when interpreting and sharing images. We used video for participants to answer specific questions in place of text responses, rather than to capture things about the participant’s environment. These videos helped us get a better ‘feel’ for each mother but were not an example of photovoice methodology.
- **Iterative interviewing** (Bowden & Galindo-Gonzalez, 2015). This makes use of the opportunity for teams to interpret participant responses to one question or activity before sending out the next question/activity, in order to use each insight to tailor what comes next. Bowden & Galindo-Gonzalez (2015) found this to be resource intensive, with one researcher able to engage in two iterative email interviews over the same time-period. Our activities were preset to allow the research period to run with minimal facilitation however a more iterative approach would have established stronger relationships and facilitated deeper insights.
- **Sharing selected insights with other participants** (MacLeod et al., 2017). This uses social media channels such as Facebook or WhatsApp groups for participants to share their responses to different activities with one another, and to like or build on their responses asynchronously. This can build togetherness and support participants who may be unsure how to carry out an activity – particularly more creative ones. We did not do this, which meant connections were not formed or strengthened between participants.





Much of our early time was occupied aligning on what we wanted to explore with families, which left much less time for us to sit in the space of how we might best explore this. In some cases, we identified high promise methodologies in advance but lacked the time to arrange appropriate technology to support these. We recommend teams allow longer timelines to plan for virtual research, including securing and testing appropriate technology. We also caution teams against viewing virtual asynchronous research as a time saving approach, suggesting instead teams view it as an alternative way of accessing information that demands as much time, attention and care as physical research.

Following this research, team members **reflected** on the data, using an inductive approach to understand emerging themes. These themes were shared with participants in virtual engagement three. As the team juggled workload, the team members who synthesised the asynchronous research were different to the team members who conducted the introductory interviews. Although the team were deliberate in sharing insights, in retrospect we suggest that teams have at least some consistent team members across all engagements with participants.

Further planning and recruiting

Following our first and second virtual engagements, we **planned** for how we might recruit further participants for our third virtual engagement and **planned** the details of this third engagement.

To **recruit** more participants, we spoke again with recruitment agencies, launched further Facebook and Instagram campaigns, and contacted establishments in potential locations such as libraries and service stations to ask them to print and display a recruitment flyer with QR code – most establishments we contacted agreed to do this, although we had no way of confirming if they did.



Some new people followed the link to the recruitment landing page which contained a simple overview of the ask along with details of compensation, but none clicked through to the sign-up page. We were unable to identify any clear cause for this drop out. Hillman et al. (2015) identified that people may be suspicious about whether virtual teams are authentic and can be trusted, which may have been a barrier. It was also leading into December as we moved into the next virtual engagement – other times of year may be more feasible for potential participants. We propose that understanding the sort of recruitment information – if any – that would entice people to sign-up to virtual engagement is an area warranting further research.

Ultimately our efforts to **recruit** participants from a wider array of locations for the next stage of the work were unsuccessful and we moved into our third virtual engagement with seven of our eight participants from the first two engagements.

As we **planned** to **facilitate** our third engagement, we found we had a delicate balance to navigate. We were committed to moving forward on our primary question of how in-home learning might be facilitated for remote families, and what the role of digital technologies might be in this, as we recognised the very significant challenges in establishing physical early learning services in these locations. At the same time, we became increasingly aware that we needed to be able to contextualise in-home learning within families' broader early childhood education and care needs. This felt important for two reasons. Firstly, mothers in our first two virtual engagements spoke to complex and multifaceted needs we felt it important not to gloss over. Secondly, our ongoing **resourcing** was highlighting the complexity of the tapestry of various existing early childhood services across remote communities. Therefore, we sought in our design approach to continue to address our primary questions whilst also ensuring we were further deepening our understanding of the broader ecosystem we were working within.

To achieve this, we drew both on insights from our first two virtual engagements and prior Goodstart work that had identified various ways families' early learning and care needs could be met, including digitally, to develop a series of concept cards describing possible ideas for both digital and non-digital service offerings. Discussing and rating these occupied the majority of our third virtual engagement.

We also had a decision to make as we **planned** for our third virtual engagement around whether we would **facilitate** this as a group session or as sessions with individual mothers. We ultimately decided to conduct this individually with mothers for two key reasons:

1. Mums had very busy lives with different time availabilities around work and family commitments – flexing the time to suit their needs was felt to be the best way to secure their participation especially given the tight timelines we were working on.
2. Team members past experience with facilitating group virtual sessions was very challenging when these were compounded by technology challenges, and we were aware that some mothers had extremely poor internet connectivity and others only had access to mobile phones (not laptops or tablets).

Although we had a three-week window between virtual engagement two and virtual engagement three, almost the whole team was on-the-ground in Ngurupai for most of this period. This made **planning** for virtual engagement three very challenging, particularly with the ongoing effort directed towards **recruiting**. The nature of synchronous virtual engagements means these must be shorter than face-to-face engagements and present greater barriers to building rapport and trust (Constantin et al., 2021; Fails et al., 2022; Fouqueray et al., 2023; Galabo et al., 2020; Savoy et al., 2022; Mallakin et al., 2023; Osborne et al., 2022). We suggest therefore that more, rather than less, planning time is needed throughout the course of the project to navigate the most high-impact way to utilise scarce time with participants.

Virtual engagement 3: 29 November – 6 December (3B)

For our third virtual engagement, we **facilitated** a 90 minute virtual codesign session with each mother.

	Objectives	Format	Duration
1	Establish relationship between participant and designer	Semi-structured interview	10 minutes
2	Rate and discuss challenges identified from data gathered through first two virtual engagements	Challenge cards via Facebook	15 minutes
3	Understand the digital behaviours of parents in remote settings	Semi-structured interview	10 minutes
4	Rate, discuss and rank possible concepts for supporting early childhood education and care, including various modalities for supporting in-home learning	Concept cards via Facebook	55 minutes

Codesign session structure

Within the sessions, activity (1) and (3) adopted a semi-structured interview approach. In addition to looking to establish rapport, activity (1) also provided us the opportunity to ask some clarifying questions – for example, to ensure we were correctly classifying participants into one of two segments. Activity (3) allowed us to dig deeper into the digital behaviours of parents in remote settings, to expand on our insights from our early asynchronous research. Some of the asynchronous design techniques described earlier could have assisted us to gain deeper insight into this space during our original research phase, which would have freed more space for concept testing and generative thinking in this virtual engagement.

Activities (2) and (4) leveraged Facebook to visually show participants challenges and design concepts. Originally we had hoped to use Instagram as the functionality was more conducive to the activity, however quick conversations with participants confirmed Facebook was their preferred option. Examples of challenge and concept cards are shown on the next page.

These are the **challenges** remote families face to access early learning and care.

<h2 style="text-align: center;">Isolation</h2> <p>Geographical isolation means parents are disconnected from social networks and support.</p> <p>Impact young parents mental health and wellbeing, and leave them feeling isolated.</p> <p style="text-align: center; font-size: small;">CHALLENGE ONE</p>	<h2 style="text-align: center;">Time Poor</h2> <p>Young parents living in remote areas are juggling work, life and caregiving demands.</p> <p>leave them feeling time poor and stressed.</p> <p style="text-align: center; font-size: small;">CHALLENGE TWO</p>	
<h3 style="text-align: center;">Lack of Support</h3> <p>There is limited support to help young parents provide for early education to their children.</p> <p>Result in young parents experiencing uncertainty and fear of "doing the wrong thing."</p> <p style="text-align: center; font-size: x-small;">CHALLENGE THREE</p>	<h3 style="text-align: center;">Harsh Climate</h3> <p>The conditions in remote areas of Australia are harsh, meaning young parents experience extreme weather conditions.</p> <p>Limit the amount of time young parents can spend outside with their children.</p> <p style="text-align: center; font-size: x-small;">CHALLENGE FOUR</p>	<h3 style="text-align: center;">Financial Concerns</h3> <p>There is limited support to help young parents provide for early education to their children.</p> <p style="text-align: center; font-size: 2em; color: yellow;">+5</p> <p>Result in young parents experiencing uncertainty and fear of "doing the wrong thing."</p> <p style="text-align: center; font-size: x-small;">CHALLENGE FIVE</p>

Screenshot of Facebook challenge cards

<h2 style="text-align: center;">Provide Care</h2>	<p>A mobile care service where parents can drop-off their children so they have more time in their day.</p>
A SOLUTION TO...	THIS WOULD INVOLVE...
Seasonal Care <ul style="list-style-type: none"> A care centre that travels to remote locations in busy seasons to help parents juggle work demands. <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	Permanent Care <ul style="list-style-type: none"> A long-term daycare centre that travels to remote locations on selected week days. <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>
<h3 style="margin: 0;">let's discuss</h3>	
👍 Like 💬 Comment ➦ Send	

<h2 style="text-align: center;">Build Community</h2>	<p>A community-building experience that supports parents to come together, socialise and, get advice from a Goodstart educator.</p>
A SOLUTION TO...	THIS WOULD INVOLVE...
Pop-up Roadshow <ul style="list-style-type: none"> An annual pop-up roadshow, that provides helpful resources and the opportunity to connect with other young families <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	Social Media Group <ul style="list-style-type: none"> A social media community group where parents can connect and share resources with each other <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>
Weekly Playgroup <ul style="list-style-type: none"> A weekly playgroup for parents and kids at the local community centre <p style="text-align: center; font-size: 2em; color: yellow;">+2</p> <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	
👍 Like 💬 Comment ➦ Send	

<h2 style="text-align: center;">Support Parents</h2>	<p>Advice and support for parents to build confidence and knowledge in at-home early learning, supporting child behaviour and, responding to child developmental needs.</p>
A SOLUTION TO...	THIS WOULD INVOLVE...
Online Workshop <ul style="list-style-type: none"> Online group workshops for young parents in the community <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	In-person Workshop <ul style="list-style-type: none"> Physical group workshops for young parents in the community <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>
Home Visits <ul style="list-style-type: none"> One-on-one home visits from a Goodstart educator <p style="text-align: center; font-size: 2em; color: yellow;">+4</p> <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	
👍 Like 💬 Comment ➦ Send	

<h2 style="text-align: center;">Provide Early Education</h2>	<p>At-home early learning resources that support children on their developmental journey.</p>
A SOLUTION TO...	THIS WOULD INVOLVE...
At-home Kit <ul style="list-style-type: none"> The distribution of physical packs containing resources / activities my child can engage with <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	Education show <ul style="list-style-type: none"> An educational video or show for children <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>
Virtual Educators <ul style="list-style-type: none"> Online lessons for your children with a Goodstart educator <p style="text-align: center; font-size: 2em; color: yellow;">+2</p> <p style="font-size: x-small;">THIS COULD BE DONE BY...</p>	
👍 Like 💬 Comment ➦ Send	

Screenshot of Facebook concept cards

Our experience using Facebook to display challenge and concept cards was mixed. On one hand, these provided effective visual prompts that enabled the challenges and concepts to be explored with mothers. On the other hand, it was technically challenging for mothers with only a single mobile phone who had to toggle between applications, and it was difficult for mothers to rank concepts when they couldn't see them all simultaneously or physically move them around. We suggest teams allow the time to explore virtual engagement tools to identify tools that are most fit-for-purpose.

In addition to device limitations and challenges with Facebook, two mothers had to complete the session via voice rather than video call, with one mother having to park her car by the side of a road to get sufficient reception to complete the session. Challenges with technology have been frequently reported in the virtual codesign literature (Bowden & Galindo-Gonzalez, 2015; Constantin et al., 2021; Hillman et al., 2015; Kennedy et al., 2021; Osborne et al., 2022). This has both practical and equity considerations – we are very conscious that we only spoke with mothers who felt they had sufficient access to and confidence with technology to choose to participate, and that some of those mothers' participation was restricted through their experience of the technology. This suggests to us that alternative non-virtual methods are also needed to promote equity for those who may otherwise be excluded or marginalised.

As we managed team logistics, the team members who conducted these engagements had also synthesised the insights from the asynchronous research but were not the people the participants had met during the warm-up interviews. Although these sessions were still rich, our impression on reviewing the recordings was that this change in facilitators likely reduced rapport which may have constrained insights. Others have flagged the broader challenges of developing rapport through virtual mediums (Bowden & Galindo-Gonzalez, 2015; Constantin et al., 2021; Fails et al., 2022; Fouqueray et al., 2023; Galabo et al., 2020; Hillman et al., 2015; Savoy et al., 2022; MacLeod et al., 2017; Mallakin et al., 2023; Osborne et al., 2022). We posit consistent relationships may be especially important when codesign is conducted through virtual mediums.

Our choice to conduct these sessions with individual mothers was a deliberate one. However, we were very struck by the missed opportunity to create a sense of togetherness between participants that could have started to **build for change** – particularly as all participants came from one geographic region. Others have identified the inherent challenges in creating a sense of togetherness with collaborative virtual approaches which can easily become task rather than relationship focused (Bowden & Galindo-Gonzalez, 2015; Hillman et al., 2015; MacLeod et al., 2017; Mallakin et al., 2023; Osborne et al., 2022). Our choice to work only individually with mothers compounded this. We sense that while there is real value in individual sessions, these would be most powerful when combined with group sessions.

Overall, our virtual engagements were able to effectively investigate participants' views on the different challenges and concepts and build understanding of what might be required to meet their needs. However, the choice of activities, short session duration and lack of group interaction meant these conversations did not move into a more generative space, and genuine codesign. As a result mums were a source of critical insights rather than true partners in the design process. A potential remedy for this may be to follow-up individual sessions with small group codesign sessions, ideally with both virtual and in-person options. In this way, the individual sessions would perform more of a **sensitising** role for both participants and designers, enabling the subsequent **facilitation** of successful generative, collaborative sessions.





Reflecting (3C)

Our original timeline saw us completing our **reflecting** in January 2023. However, when we took stock of the conclusions we had reached, we were not yet satisfied we had a clear and compelling way forward that was respectful of the complexity of the challenge. There were several drivers for this:

- **Recruiting** challenges had pushed out the timelines for facilitating virtual engagements, reducing time for reflection.
- Recruiting challenges had also pushed out timelines for **resourcing**, meaning insights around the current remote Queensland landscape had been incorporated late in the process.
- **Facilitating** virtual engagements was less immersive and only involved some team members, which increased the time needed to share and **reflect** on these as a team.
- We found we tended to prioritise the physical (Stream 1) over the virtual (Stream 2) when tradeoffs needed to be made, reducing the time we spent **reflecting** for this stream.

We therefore decided to extend our **reflecting** by several months, to allow us to review all source data again, and to better consider our insights in the context of the existing Remote Queensland service landscape.

This time was crucial to developing a way forward we felt confident in, however it caused some logistical challenges as our contract with Today came to an end and internal team members were booked to move on to other projects (with an eye to returning to this work once funding for any future stages was secured). Fortunately, we were ultimately able to negotiate for several team members to see this through to completion, however in retrospect it was clear we had not allowed sufficient time for **reflecting** through the work or at the end.

Virtual approaches may offer certain time savings, but teams can expect to spend as much time or more reflecting as they would with a physical approach.

We engaged in little **building for change** through this stream, aside from the preliminary conversations we held with some service providers to understand their experience of working in remote Queensland. Consequently, our work here ended with the identification of promising desirable directions to be further explored with a broader group of stakeholders in the next phase.

While this represents a successful outcome for this work, we suggest that allowing more time and space for **resourcing** and **building for change** at the front end of the work could have both further strengthened final outputs and smoothed the transition into the next phase of the work. We recommend other projects be more intentional in allowing for this.



Closing reflections

We set out to answer the question:

How might we address disproportionate developmental vulnerability for remote children by codesigning sustainable, scalable, high-quality education and care offerings that advance education within Australia?

To do this, we contemporaneously employed two different codesign methodologies. In Stream 1 we immersed ourselves in community, drawing on **decolonising participatory codesign** to foster community ownership of local change aimed at helping First Nations children grow up strong. In Stream 2 we worked remotely, using **virtual human-centred codesign** to understand how in-home learning could be supported including specifically the role of digital technology.

Both approaches were successful in pointing the way forward. However, our immersion in community resulted in richer and more contextualised insights as well as far greater momentum for change. Building momentum for change was not an upfront goal of our virtual codesign. However, our findings led us to recognise that for digital technologies to meaningfully support in-home learning communities needed to be deeply involved in their design and their integration with in-person services. Therefore, moving forward with this work will require approaches that forefront trusted relationships and create the space for collaborative and generative codesign. We suggest this is likely to hold true for others looking to address complex social challenges, including through digital technologies.

We identified virtual codesign methods and tools that could support this, but suggest hybrid approaches are likely to be more effective in avoiding perpetuating inequities. Importantly, virtual codesign should not be seen as the quick, easy or light-touch option if it is to effect real change.

We found Trischler et al. (2019) and Kennedy et al. (2021)'s seven steps of codesign (planning, resourcing, recruiting, sensitising, facilitating, reflecting and building for change) a helpful frame for considering both approaches. However rather than a “fuzzy front end” and “fuzzy back end” which clearly delineated middle steps, we found when immersed in community we were continually engaged in all seven steps in an iterative way. Our virtual codesign was somewhat more linear, however this felt like a limitation rather than strength of the approach. Teams should be equipped with the time, skill and organisational support to navigate these iterative processes.

In addition to these seven steps, we suggest that team building is an essential part of the process, especially for new teams and for teams who will be immersed in remote communities. These can create intense working environments, and strong foundations will enable teams to effectively negotiate the tensions that inevitably arise in the work.

Just as in teaching, improvisation is an inherent part of the codesign process, and this was very evident in our work. We therefore offer up our processes and reflections not as a definitive how-to guide, but rather in recognition that ‘people are able to improvise better when they have a prior structure in mind’ (Lee et al., 2021, p.12).

We wish you success in your codesign journeys and look forward to learning more together.

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