FRAMEWORKS INSTITUTE

Finding the Southern Cross:

A FrameWorks MessageMemo for the Centre for Community Child Health

A FRAMEWORKS RESEARCH REPORT: MARCH 2014

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Introduction

> *"When the Portuguese mariners got below the equator, the North Star was no longer in the heavens, which meant that they had to develop new celestial navigation with the Southern Cross, the constellation visible in the Southern Hemisphere almost any time of the year."*
>
> – Joyce Appleby, *Shores of Knowledge: New World Discoveries and the Scientific Imagination*

This MessageMemo summarizes research the FrameWorks Institute conducted for the Centre for Community Child Health at the Royal Children's Hospital in Melbourne. The Centre wished to use communications research to:

- Support the government's efforts to ensure the long-term well-being of children as healthy citizens and productive workers;
- Assist the field of practice in effectively conveying the science of early child development to the public and decision-makers in such a way that it helps Australians appreciate quality programs and policies; and
- Deliver a master narrative that unites disparate parts of Australia's child development and mental health agendas over time.

Over time, in consultation with the Centre, a focus on child care emerged that influenced and directed subsequent phases of this research. While child care is clearly one of several foci in this report, we will be devoting a subsequent MessageMemo more specifically to this topic.

To support the Centre's goals, the FrameWorks Institute conducted a series of studies that document the conceptual challenges faced by communicators in translating the science of early child development and mental health in the Australian context. The research also empirically explores and tests a set of tools that can be used to translate this science and increase support for evidence-based programs and policies designed to improve child and social outcomes in Australia. This research builds upon similar inquiries undertaken by FrameWorks in the United States and Canada.

Like the Portuguese mariners described above, FrameWorks came to this task with an

orientation, tools of exploration, and discoveries drawn from similar inquiries north of the equator. These tools and maps required adaptation to the Australian context if they were to steer a sound course for communicators in the Australian cultural context. The values, Explanatory Metaphors and other reframing strategies required FrameWorks' researchers to remap their understandings of how people view child development, and the role of the nation in furthering it, to redraw the situation analysis and to reconstruct and adapt the tools we brought with us from parts north. We hope that this document serves to equip Australian child advocates with new context-sensitive tools that can be used to orient their communications.

The research base informing this MessageMemo is as follows:

1. FrameWorks drew on over 60 interviews conducted with international experts on the science of early child development. In addition, FrameWorks researchers conducted 12 interviews with experts specializing in the science, practice and public policy of early childhood in Australia.[1]

2. A total of 40 one-on-one, 2-hour interviews were conducted in July 2012 with Australians in Sydney, Melbourne and Brisbane to document the cultural models that Australians use to think about issues related to early child development.[2]

3. A large experimental survey was conducted in October 2013 with 4,400 Australians recruited to represent a national sample. This study allowed FrameWorks to assess the impact of exposure to a variety of values and Explanatory Metaphors on respondents' ability to understand the recommendations of the early childhood development scientific community, and to increase public support for specific programs and policies stemming from these recommendations.

4. A series of on-the-street interviews conducted with approximately 100 Australians in Melbourne and Hobart in December 2013 tested the effectiveness of a set of Explanatory Metaphors in capturing and communicating key aspects of the science of early child development.[3]

At this stage in the research project, more than 4,500 Australians have participated.

This MessageMemo is not intended to take the place of the research reports that inform it; indeed, FrameWorks strongly recommends that communicators avail themselves of these reports and challenge their own creativity to apply this learning. In addition to

summarizing and synthesizing that body of work, this MessageMemo *extends* this descriptive research by providing another level of more detailed and prescriptive interpretation to inform the work of those communicating about children and child development in Australia.

This MessageMemo charts a course through the dominant patterns of reasoning employed by the Australian public, identifies the major challenges for those communicating about the science of early child development in the context of this understanding, and recommends how communications may redirect their messaging to expand public understanding and increase support for evidence-based policies and programs to improve child outcomes. It is organized as follows:

- We first **Chart the Landscape** of public thinking by providing a description of the dominant patterns of thinking that are chronically accessible to Australians in reasoning about early child development, and the communications implications of these dominant models.

- We then identify the **Gaps in Understanding** between experts and ordinary Australians — features that bring into relief the specific locations where translation is needed if expert knowledge is to become accessible to the public in understanding and reasoning about children's issues.

- We then provide an outline of **Redirections**, research-based recommendations that represent promising routes for improving public understanding of child development.

- We end with a cautionary tale of the **Traps in Public Thinking** that must be avoided if reframing is to succeed.

I. Charting the Landscape: Default Patterns of Thinking

The mental landscape on early child development presents a complicated terrain. In this section, we discuss some of the most prevalent and highly shared patterns of understanding, or "cultural models,"[4] that ordinary Australians rely on when asked to think about *what early child development is, how it happens, and what can and should be done to improve its outcomes*. These patterns in understanding constitute the challenges that reframing research must address. It is crucial that communicators who seek to expand public thinking on early child development, and give Australians access to information on this issue, become familiar with these default patterns of thinking in order to accurately anticipate what obstacles their communications face, and must overcome. Below, we describe the most important features of this landscape for those communicating about early child development. A more complete and in-depth analysis of public understanding of issues of early child development can be found in the FrameWorks report *Modernity, Morals and More Information.*[5]

- The *Aging Up* model — Australians have considerable difficulty thinking and talking about *early* childhood, and exhibit a strong tendency to quickly refocus conversations about early childhood to discuss later childhood and early adolescence.

- The *Threat Of Modernity* model — Perhaps the deepest and most powerful cultural model observed throughout research is the assumption that children today are struggling and suffering because the country is no longer what it used to be. More specifically, people reason that families have splintered and lost their traditional roles, communities are fractured and materialism has become the way of life. From this perspective, children are destined for negative development and considerable difficulty. Nostalgia, determinism and fatalism all flavour this cultural model.

- The *Family Bubble* model — Australians implicitly focus their thinking on development — what shapes development, what can be done to improve development and who is responsible — at the family level. This focus frequently excludes consideration of other factors and agents that influence family dynamics and affect a child's development.

- The *Fill It Up* model — Australians have a thin understanding of how development

happens — reverting to a shared assumption that development is about a child soaking up knowledge and information in a highly passive way. From this perspective, development is about making sure parents are "giving" children the right information and inputs.

- The *Separate Influences* model — Members of the Australian public have considerable difficulty in thinking about environments *interacting* with genes to influence outcomes. Instead, they see genes and environments as each influencing separate outcomes in discrete ways, and generally attribute to genes and biology very weak roles in a child's development.

- The *Bubble Wrap* model — In thinking about positive development, there is a dominant shared understanding that *safety* is the name of the game. In other words, Australians come to conversations and information about development with the assumption that positive development is fundamentally a protective and insulating (rather than an enriching) endeavour.

- The *Child Care = Babysitting* model — Child care is a *strongly modelled* issue for Australians, where thinking is premised on the assumption that child care is a place to put children so that parents can go to work, and that *not* sending children to child care is always preferable to putting them into the care of someone other than their mother. In short, Australians attribute a custodial function to child care and undervalue the role of such child care as a context of positive development and enrichment.

- The *Development = Learning* model — Thinking about the results of development, Australians have a strong and highly shared understanding of development as a process fundamentally about *learning*. Specifically, Australians emphasize the importance of children learning morals, self-discipline, social skills and, above all else, self-reliance.

- The *Stretch But Not Break* model — As a more specific part of the *Development = Learning* model, Australians have access to, and can employ, a skill-based learning model to understand development. Employing this assumption, they reason that development is fundamentally about learning, and that learning entails a process of challenging children and pushing them just out of their comfort zone, all while adults provide support and guidance. This model is highly productive in its approximation to concepts from the science of development.

- The *Medicalization Of Childhood* model — Related to the powerful sense of nostalgia that flavours Australians' thinking about childhood and child development was a strong anti-science sentiment in which people see childhood as being threatened by a myriad of new medical diagnoses, and the over-prescription of pharmacological drugs.

- The *Information Is Everything* model — The most dominant model that Australians use to reason about what can be done to improve the way that children develop is the notion that delivering more information to parents so that they can make better decisions is the silver bullet solution.

The following graphic represents these and other cultural models that comprise the "swamp" — the constellation of implicit understandings, assumptions and patterns of reasoning — that members of the public draw on to make sense of issues around early child development.[6]

II. Gaps in Understanding

Gaps in understanding are those places where the cultural models employed by the public to think about an issue differ significantly from experts' understanding of the same issue. As such, gaps in understanding represent strategic opportunities for framing to bridge gaps between expert and lay understandings. We enumerate the gaps below. In the next section, we assign specific frame elements — particularly values and metaphors — that were tested in our prescriptive research to fill these gaps and promote public understanding.

Gap No. 1: Child Care: A site of development vs. a safe place for children to go while parents work. Experts conceptualize child care as a valuable site of development — both as having the ability to *enrich* positive development, and also as an important site of *intervention* in cases of developmental difficulties. Australians, on the other hand, firmly understand child care as perpetually second best, as a custodial institution and as an unfortunate feature of modern life — one that we should work to keep children out of.

Gap No. 2: Programs and Interventions: Quality is key vs. quantity and safety. While experts focus on the *quality* of interventions, explaining that there are programs that work to improve developmental outcomes, and others that are not effective in improving outcomes. From this perspective, improving programmatic quality is a central mandate. Members of the Australian public see programs and interventions as important for parents to have access to and, based on a safety model, focus on the ability of these interventions to guarantee child safety, rather than enrich development.

Gap No. 3: Similarities and Differences: Common processes vs. group differences. Experts focus on common developmental problems and, by extension, general strategies that can be pursued to address these processes and improve outcomes. Members of the Australian public focus on differences between groups of children — an understanding that keeps them from recognizing the existence, and importance, of processes that run across groups and affect all children and, by extension, the potential power of public interventions and programs to improve child and social outcomes.

Gap No. 4: The Process of Development: Active and dynamic vs. passive and uni-directional. Experts conceptualize development as an active process where the child is a volitional and engaged agent. Reasoning from their most dominant model of how development happens, members of the public conceptualize the child as a passive recipient of knowledge and information, delivered from parents and teachers.

Gap No. 5: What Develops: Social, emotional and cognitive skills vs. happiness … and self-reliance. Experts focus on the interdependence of social, emotional and cognitive skills as the outcomes of development. While members of the public can see social skills as being important, their focus is firmly on individual happiness and self-reliance as the outcome of development.

Gap No. 6: Relationship of Causal Factors: Interactive vs. discrete. While the notion of gene-environment interaction is the centrepiece of the expert account of development, this process is absent from public understanding. In its place is a model in which factors exert *influences* on distinct outcomes and genes play a relatively minor role.

Gap No. 7: Stress: Developmental derailer vs. (almost) non-existent. While, for experts, contextual stress is the major antagonist in the story of development, stress is largely a missing consideration in the public's understanding of child development.

Gap No. 8: Science: Part of the solution vs. part of the problem. Representing a major obstacle in translating the science of child development, the importance and role that scientists attribute to their work and its ability to improve outcomes is *not* shared by members of the public. Instead, members of the public often view "science" and "research" as capricious at best and, at worst, as contributing to the problems that they see with "the world today."

Gap No. 9: Information: Better vs. more. While both experts and members of the public focus on the importance of providing information to the public, experts emphasize the need for *better* information, and clearly position information provision as *part* of a larger strategy for addressing and improving development. Members of the public, on the other hand, focus on the need for *more* information as *the* solution — not considering the importance of the quality of this information or the role of public education as one piece in a larger, context-based strategy to improve developmental outcomes.

Gap No. 10: Situation Analysis: Can be improved through better policies and programs vs. crisis and futility. In general, experts are optimistic about the ability of programs and policies to create meaningful change in the lives of children, the adults they become, and the society and communities of which they are part. The public's view, drawing heavily on the *Threat Of Modernity* model, is much less optimistic and focuses fatalistically on the inability to meaningfully address and improve social problems — of which the state of children in Australia is but one of many.

Gap No. 11: Temporal Focus: Forward vs. backward. Finally, experts focus on the progression of scientific knowledge, and the power of current and future discoveries, as key to improving outcomes for children. Members of the public are orientated in the opposite direction — looking back to a (mythic) past for the answers to problems with "children these days."

III. Redirections

Finding a more productive route along the cognitive map requires communicators to manoeuvre around the highly accessible, but unproductive, patterns of thinking that constrain the public's understanding of the causes, mechanisms and socio-political solutions relevant to early childhood development in Australia. This will require using proven strategic framing strategies and tools to redirect attention by clarifying what early child development is, how it happens, and how it can be addressed by programs and policies.

Based on the research findings to date, we offer the following evidence-based recommendations for communicators.

What to Do

1. **Use empirically tested values.** Scientific research on effective framing leads FrameWorks to strongly recommend building messages around a specific value. Putting a value at the top of communications gives audiences a sense of what is "at stake," motivating their engagement. Values also have the power to orient thinking about subsequent content, creating alignments between the public's thinking and that of experts.

   Analysis of the gaps between expert and public understanding among Australians in the area of early childhood development, discussed above, led to the development of six candidate values:

   - *Opportunity For All*, which concentrated on the necessity of giving each child the chance to be healthy and have a good education in order to have a "fair go" at life.

   - *Innovation/Problem Solving*, which reminded respondents that Australians are a "can do" people who innovate to solve problems.

   - *Future Functionality*, which emphasized the need to improve child development structures, so children could become the citizens and leaders Australia will need in the future.

   - *Community Strength*, which focused on the need for children's programs that

would create ties to build and strengthen Australian communities**.**

- *Return on Investment/Collective Prosperity*, which revolved around the fact that investment in children increases everyone's welfare.

- *Gender Equity/Women's Workforce Preparation*, which advanced the idea that investing in children, specifically by providing child care, would allow women the freedom to enter the economy and contribute to the strength of the country.

These values were tested in a large survey experiment,[7] which used random assignment and experimental control (a group not exposed to a value but completing all the outcome questions), to determine which, if any, might motivate Australians to engage in the early childhood development discussion and orient them toward aligning their judgments with those of the field's experts. Respondents' attitudes and policy preferences were charted along eight domains:

- *Attribution Of Responsibility:* These questions measured the degree to which respondents were willing to place responsibility for improving child welfare on the government; for example, "Policymakers need to do more to improve the ways in which our government helps young children."

- *Child Care:* These questions charted respondents' support for policies designed to increase access to high-quality child care; for example, "We need to make sure that all children have access to high-quality child care and early education programs no matter their income level or where they live."

- *Poverty:* These questions charted respondents' support for policies designed to alleviate child poverty; for example, "We need to expand paid parental leave programs for low-income parents, so they can spend a year caring for their newborns without the risk of losing their jobs."

- *Importance of Community Context and Quality:* These questions assessed respondents' willingness to acknowledge the importance of community in raising children; for example, "We should focus more resources on building community centres that include education opportunities for parents and help parents access community support services for their families."

- *Children's Mental Health:* These items tapped respondents' support for programs aimed at improving children's mental health; for example, "High-quality mental health services should be available and accessible for all parents, caregivers and

children in Australia."

- *Child Maltreatment:* These items measured respondents' endorsement of services to address child maltreatment; for example, "We should increase funding and evaluation to make child abuse and neglect prevention programs more effective and responsive."

- *Early Childhood Education and Care (ECEC) Reform:* These questions assessed respondents' eagerness for making improvements to the ECEC system; for example, "We need to strengthen child health and early education services so that they can respond more quickly to emerging problems."

- *Efficacy:* These statements addressed the degree to which policies directed at improving child development are perceived to be effective; for example, "Making changes to the way that communities are supported can improve child well-being."

Each of the six candidate values outperformed the control group in moving attitudes and policy preferences in the direction suggested by experts across all of the eight aspects of early childhood development opinion assessed. It is clear that values offer an important cognitive asset in reframing Australian thinking on these issues.

One value, *Return on Investment/Collective Prosperity*, tended to outperform other values; *Return on Investment/Collective Prosperity* produced the largest substantive and statistically significant movement along five dimensions: *Poverty*, *Community Context and Quality*, *Children's Mental Health*, *ECEC System Reform* and *Efficacy*. In short, Australians seem to respond best to an investment model in which allocating resources to children, and improving early childhood development programs, will create a better society. The following paragraph is an illustration of the *Return on Investment/Collective Prosperity* value.

> *Australia needs to invest in children's development so that everyone in our country can succeed in the future. This is important because our nation's prosperity depends on the collective investments that we make in all of our children's development. When we devote resources to improve programs and services that help all children be healthy, get a good education, and contribute to our collective prosperity, we all benefit. Increasing our investments in young children and the programs that support them will help ensure that we are a thriving and prosperous country in the future.*

Along the remaining three dimensions, other value frames outperformed *Return on Investment/Collective Prosperity*, but not by a statistically significant margin. These exceptions stem from an intimate connection between the value frame and the dimension under consideration. Most obviously, *Gender Equity/Women's Workforce Preparation* demonstrates the strongest performance when it comes to putting resources into childcare programs. The following is an example of this value and its suggested use.

> *Australia needs to invest in children's development so that women can have the freedom to work and contribute to the economy. This is important because our nation's prosperity depends on all citizens being able to work and be active members of our society and economy. This means devoting resources to improve programs and services that help all children be healthy and get a good education, so that the women of Australia can have the freedom to re-join the workforce. This will help ensure that people don't have to make the decision between work and quality care for their children.*

Given the tensions one might expect between policy support among respondents with different partisan loyalties, it is useful to note how each of the successful values overcame these demographic predispositions. *Return on Investment/Collective Prosperity* was extremely powerful in reducing the gender and party differences found in attributions of responsibility — indeed, this value reduced these differences, nearly halving the gap between men and women, and reducing the spread between partisan groups by three per cent, in ways that no other value did. Among this value's other impacts, on *ECEC System Reform* and *Child Mental Health* it moved diverse demographic groups closer to consensus.

While it is difficult to go astray with any of the value frames tested, **the evidence suggests that talking about the importance of investing in improving programs to support early childhood development and the consequent future benefits to society is the best way to engage Australians and prompt their willingness to support the programs early childhood development experts advocate.** It is important to note that, for the value to be effective, both sides of the equation must be collectivized — that is, the investments must be in Australia's children (rather than specific children), and the benefits must be for all Australians.

2. **Use Explanatory Metaphors.** The following Explanatory Metaphors have been quantitatively and qualitatively tested in Australia, where they have clearly demonstrated their ability to powerfully address specific gaps and communications challenges.

    ➡ **The *Outcomes Scale*.** This metaphor, an example of which can be found below, is highly effective in closing the expert-public gaps around processes of development and the relationships between causal factors (Gaps 3, 4 and 6 from the section above). Communicators should use the metaphor to communicate the following key points from the science of early child development:

    - Developmental outcomes and individual differences are the product of:
        - different genetic starting points,
        - different positions to which environments and experiences slide these starting points, and
        - the weight applied by risk and protective factors.
    - The effect of contextual factors is mediated by biology.
    - Genetic starting points are not fixed and brains are plastic.
    - There is an unequivocal danger of risk-factor pile-up.
    - Resilience is a positive outcome despite there being negative weight on the scale.
    - Outcomes can be improved in multiple ways, but there are periods where this is easier to do than others.

    Think of a child's development as a scale. The way the scale is tipping is like the outcome of the child's development. Positive things like supportive relationships get loaded on one side, and negative things like abuse, neglect or community violence and lack of resources get stacked on the other. The goal of every community is to have as many children as possible tipped towards the positive side. To do this, we can offload as much weight as possible from the negative side and we can stack as many factors on the positive side as we can. This is called stacking the scale. We also know that we can give kids support early to help them develop coping skills — these skills push the rocking point over to one side and make the scale harder to tip negative, and able to bear more negative weight and still tip positive. This is what resilience is.

➡ ***Levelness***. This reframing tool was powerful in addressing two particular communications challenges: the public's difficulty in seeing the interactive nature of causal factors, and the overwhelming focus on "more information" as the solution to developmental issues and negative outcomes (Gaps 6 and 9, above). In addition, the metaphor was highly effective in getting people to a shared and scientifically consonant definition of child mental health. The metaphor can be used to make the following points:

- Child mental health is about functioning.
- There are multiple factors that influence the developmental process. These factors, taken together, explain developmental outcomes.
- Addressing development requires context-based, multi-modal interventions — it requires addressing the contexts that the child is in.

A child's mental health is like the levelness of a table. The levelness of a table is what makes it usable and able to function, just as the mental health of a child is what enables him or her to do the things that children need to do. Some children's brains develop on floors that are level because they have healthy, supportive relationships and access to things like good nutrition and health care. For other children, their brains develop on more sloped or slanted floors because they're exposed to abuse or violence, have unreliable or unsupportive relationships, and don't have access to key programs and resources. Just as a table can't level itself, children need support and help to establish stable mental health.

➡ ***Toxic Stress*.** This tool, and the larger taxonomy of stress of which it is part, is highly effective in clarifying the idea that there are different kinds of stress, and that, while some stress can be positive, other experiences can have negative effects on a child's development. The *Toxic Stress* metaphor was able to address the general lack of attention given by members of the public to the potential ways in which stress affects child development (Gap 7, above).

There are three main kinds of stress that children can experience — there's positive stress, tolerable stress and toxic stress. Positive stress is the types of challenges that can actually help children develop — like facing a challenging social situation or preparing for a difficult test. Tolerable stress is things that could damage development, but that are buffered by having positive relationships — like having strong family support when a loved one dies. And then there is ***Toxic Stress****. Toxic Stress happens when a child experiences severe and ongoing stress — like extreme poverty, abuse or community violence — without having the benefit of consistent supportive relationships. Toxic stress affects the way that the brain and body develop, and can lead to lifelong problems in learning, behaviour, and both physical and mental health.*

➡ ***Weaving Skill Ropes*****.** This metaphor was tested for its ability to expand the skills and abilities that members of the public are able to see as outcomes of development, and to establish the interdependent nature of the development and application of these skills (Gap 5, above). The metaphor, provided below, was highly effective in these tasks. Communicators can use the metaphor to make the following key points:

- Social, emotional and cognitive skills and abilities are the objects of development, and the result of positive development.
- These skills are interdependent such that programs need to focus on all three to promote successful development — you can't do one without the others.
- These skills, in combination, are vital to a child's ability to function and complete tasks.

Learning is about the brain weaving skills together. When learning and development are successful, the result is strong set of strands that can be combined to form ropes that we can stretch and flex to do all the different types of things that we need to be able to do. These skill ropes are made up of stands such as people skills, emotional skills and thinking skills, which we practice stretching and weaving together in different ways to do different things. Children need to develop strong individual strands and they need to get practice stretching, weaving and reweaving these strands in challenging situations with support from adults. By stretching and testing these skills, children gain the skills and abilities that they need to function.

➡ ***Serve and Return*.** This metaphor's ability to provide a clear and concrete process in which children, even young children, are active participants, makes it a vital part of the new Australian narrative. It is important to note that the metaphor turns on an understanding that the "serve and return" process serves to wire the brain, and that disruptions in the serve-and-return process leave brain wiring incomplete. The metaphor addresses gaps around the process of development (Gaps 3 and 4, above) and can be used to make the following points:

- The importance of responsive caregiving for positive development, and the negative consequences incurred when these interactions break down or are absent (neglect, maternal depression, substance abuse, caregiver turnover).
- The ability of experiences and interactions to affect the development of the brain — connecting external experiences with internal biology and development.

A vital ingredient in a child's brain development is the "serve and return" interactions that they have with their parents, other caregivers and community members. Like the serve and return in a good game of tennis, young children naturally reach out for interaction with adults through babbling and facial expressions. If adults do not respond by getting in sync and returning these kinds of noises and gestures, the serve and return breaks down and the child's developmental process is interrupted, which has implications for later learning and health.

In addition to the empirically tested frame elements described above — values and Explanatory Metaphors — FrameWorks offers the following strategic recommendations for communicators as they seek to increase public knowledge of the science of child development and create support for policies and programs that will improve child and social outcomes:

- **Don't leave age unspecified.** Anchor communications by referencing specific age groups, especially when discussing *early* childhood, so as not to let people age-up their thinking.
- **Focus on *similarities* between groups and *common* processes** rather than differences between groups or individuals.

- **Provide examples of ways in which *context is key***, and develop clear explanations of *how* contexts shape outcomes — but adopt a public health approach and focus such explanations at the population level.
- **Use the *Stretch But Not Break* model** to explain the process of skill development.
- **Link the individual level to wider community and societal levels** — both in terms of causal factors and outcomes.

What to Avoid

- **Playing into separate influences.** Communicators should be careful not to get stuck in discussions that allow people to apply their discrete model of genes and environments — such as referencing only genetic or environmental factors in discussing specific outcomes, or talking about the percentage of a given characteristic that is determined by each factor.
- **Evoking the *Family Bubble*.** Great care should be taken to avoid activating the *Family Bubble* model by discussing parents in prominent positions in communications materials. Parents should be part of messages, but communicators should *not lead* with the importance of parents, or they risk getting people's attention stuck there.
- **Playing into the understanding that Australia is going to hell in a hand basket.** Communicators should steer clear of statistics that show that outcomes have grown worse over time — this will activate the unproductive *Threat Of Modernity* cultural model.
- **Relying on scientific jargon, data and diagnostic language.** Communicators should be very careful to avoid utilizing over-medication and false diagnoses as the focal problems in their messages and, more generally, should avoid scientific jargon and the potential of such language to activate powerful anti-science thinking that serves as an immediate and imposing barrier to knowledge translation.

IV. Traps in Public Thinking

In the following section, we describe common practices in science and advocacy communications that may be "easy to think," but lead in unproductive directions and result in narrow evaluations and judgments. We strongly advise that communicators avoid these practices because of their likelihood of backfiring and working against translation goals.

The Parent Trap

Parents are clearly a central factor in a child's development — but they are not the only variable in the equation, nor are parents and parenting isolated from the broader context into which they are embedded. Yet, reasoning from their default cultural models, Australians struggle to find other factors to bring into their discussions about early child development. Communicators should anticipate this sticking point and avoid this trap by being careful not to make parents the initial or exclusive focus of communications. In addition, communicators should be careful to always contextualize families and parenting, to remind people that the family is not a bubble. Getting more non-parental actors and non-residential places in communications can be effective in avoiding this trap. When discussing children, begin at the societal or community level, and discuss how parents are affected and what that means for children; that is, make sure the causal arrows are consistent with a public health model and not an individualist approach.

The Science Trap

Leading with statements of the value or authority of science is likely to backfire due to the strong anti-science sentiment that attaches to the issue of early child development. Communicators should *not* use science as a value, but instead should begin communications with the values discussed above and position science as a way of achieving these values. Scientists should use a practical and pragmatic tone in engaging Australians, and should invite them into the discussion with an explanatory engagement — for example, "Let me explain how this works so you can see for yourself."

The Big Bad Problem Trap

There is a tendency to begin communications with a strong emphasis on the enormity of the myriad problems facing children and their development. The strong senses of futility that attach to the public's thinking about this, and other social problems, suggest that such crisis-based communications are destined to fail. This thinking is highly counterproductive in motivating engagement and supporting productive thinking about issues of child development. Communicators should assign the need to "problematize" an issue, which is

an important part of an effective story, to the part of their communication where they use Explanatory Metaphors. These metaphors are particularly effective in establishing efficacy (i.e., senses that solutions and improvements are possible) through explanations of how things work. Understanding how things work and, thus, how they can be improved, can help situate problem statements and keep people from falling into the rut of thinking that this is just "another problem" about which nothing can "really" be done. Try explaining, for example, how the negative side of the *Outcomes Scale* gets "stacked" with negative exposures and environments, leading to impaired outcomes. Pair this with the dynamism of the better outcomes that can be facilitated when "factor stacking" is engineered to outweigh those negatives. Similarly, explaining the intervening variables that can turn *Toxic Stress* into tolerable stress can be effective in managing the tendency for descriptions of problems to result in unproductive, fatalistic thinking.

The Differences Trap

Communicators should avoid early discussions of differences between groups or individuals and, instead, emphasize common processes that underlie development. Once in the domain of group or individual differences, it is hard for people to accept the existence, and see the importance, of common processes and principles, and therefore difficult for them to support policy-level solutions. This is what Explanatory Metaphors accomplish; by explaining the underlying processes, they allow people to appreciate issues at the population level. As one social scientist famously intoned, "While it is useful to study one hundred hearts together, a single heart has from a functional point of view more in common with a pair of lungs than it has with other hearts."[8] One advantage of Explanatory Metaphors is that they underscore the common relationships among things — the brain and environments, for example — as opposed to comparing individual brains for differences.

The Nationalism Trap

Communicators should be aware that attempts to appeal to Australian nationalism may backfire by tapping into strong senses that the country's roots and collective identity are lost — senses that depress agency and focus people's solutions-thinking backwards rather than forwards. Boosteristic jingles and calls to action should be avoided in favour of more concrete aspirational values (*Prosperity*), and more pragmatic explanations of how the country can use developmental science to move forward.

The Safety Trap

While assuring the safety of children is an important part of successful development, communicators should be aware of the tendency for safety to "blow up" in people's minds

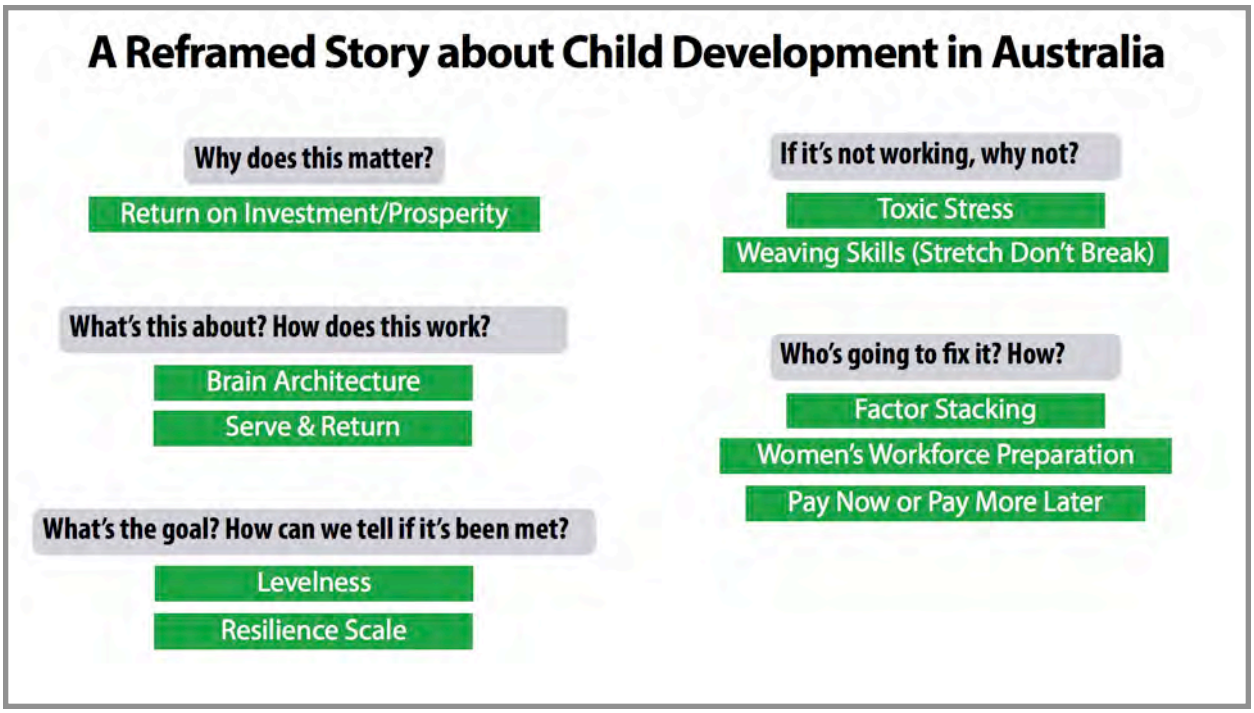
and become the *only* way to think about development — pushing out considerations of enrichment and learning, for example. As communicators use Explanatory Metaphors like *Toxic Stress* or the *Outcomes Scale*, it is important that they avoid the perception that the take-away is for parents to shelter their own children from harm, driving caregivers even further back into the *Family Bubble* and away from engagement with community and the resources and opportunities contained therein. Replace the goal of "safety" with a focus on where the ruts are in the road that children face. These predictable barriers to positive developmental outcomes are the responsibility of adults, as part of responsible communities, to root out. In this way, "protection" becomes defined as a collective screening of obstacles that could impair child outcomes.[9]

The Information Trap

Providing information to the public is clearly an important part of a strategy to improve the contexts and outcomes of child development. However, the public's myopic focus on more information as *the* solution suggests that communicators should be careful in their presentation of this solution — always featuring public education as part of a wider set of solutions, and being careful to point out that the *quality* of information provided is key to the success of this strategy. The important pivot here is to focus people on collective responsibility for removing barriers to development, not on the responsibility of individual parents to make better choices. The value of *Return on Investment/Prosperity* and the *Outcomes Scale* Explanatory Metaphor can help in making this shift.

Putting It All Together

What emerges from FrameWorks' research in Australia is a coherent narrative that can be used by communicators to pull forward productive cultural models in mind, and avoid those that impede productive consideration of the science of development, and the implications of this science for improving outcomes through more effective policy and practice. Drawing from the social science literature on how people respond to narratives about social issues,[10] FrameWorks has composed a narrative outline, identifying the "slots" in the narrative that need to be filled in by reframing elements. Here, we enumerate this narrative outline and assign the tested reframing elements to fit this structure:



We can think about executing this story in many ways; here are several examples to guide communicators' creativity:

Q: Why do some children in Australia turn out better than others? What can parents do to even the odds?

A: This is an issue for Australia as a nation, as it affects our **future prosperity**. Child development affects economic development. We now know that successful child development depends upon our ability to support a child's developing **brain architecture**, and, like building a house, what happens early is foundational to all that happens subsequently. How that house gets built depends upon what is called the **"serve and return"** process, in which the environments and experiences that children confront each day "serve up" an invitation to engage, and those experiences either stimulate or depress the child's developing brain architecture. When too many experiences weigh on the negative side — poverty, violence, abuse — the child "tips" in a negative direction. But when communities **"stack positive factors"** — caring adults, enriched environments, social networks — the child has assets that weigh toward the positive — even in the face of other negative factors. One way we can think to tip child development in the positive direction is to recognize that **most mothers cannot be home with their children in today's economy**. That's just the reality. So we, as a society, need to figure out how to

create environments that can put kids on track for positive development. We must do this now, even though it may cost us something, because it's going to **cost us a lot more later** in workforce productivity and community participation if we delay.

Q: How can we make sure that even children who grow up in bad circumstance can achieve, and not be a burden on the state?

A: When we make an investment in children's development, **we reap dividends** in multiple parts of our society: in workforce preparation, in community participation and in prevention of health burdens, for example. But we can only do this if we recognize that the child grows up in an environment, and the quality of that environment affects his or her ability to function. Think of a child in a community **like you would a table sitting on a floor**. If the child is not on a level plane, it can't support the weight that is put on it and it can't function, just as a child in a negative environment can't learn, grow and become a productive member of society. We also have to pay attention to all the aspects and strands in that child's development — social, emotional and cognitive functions **are all being woven at the same time**, and that child's ability to function depends on how strong those strands are and how they are woven together. When we only focus on cognitive development — what's learned in school for example — and ignore the child's social networks and their emotional development, we can easily end up with a child who can't function optimally. We can address this very early on in the developmental process if children and families have access to trained counsellors and teachers who can spot these problems, and help communities and parents get children the supports they need to function fully.

About The FrameWorks Institute

The FrameWorks Institute is a national nonprofit think tank devoted to framing public issues to bridge the divide between public and expert understandings. Its work is based on Strategic Frame Analysis™, a multi-method, multi-disciplinary approach to empirical research. FrameWorks designs, commissions, publishes, explains and applies communications research to prepare nonprofit organizations to expand their constituency base, to build public will, and to further public understanding of specific social issues — the environment, government, race, children's issues and health care, among others. Its work is unique in its breadth — from qualitative, quantitative and experimental research, to applied communications toolkits, eWorkshops, advertising campaigns, FrameChecks™ and Framing Study Circles. See www.frameworksinstitute.org

Bales, S.N., & Kendall-Taylor, N. (2014). *Finding the Southern Cross: A FrameWorks MessageMemo for the Centre for Community Child Health.* Washington, DC: FrameWorks Institute.

Endnotes

[1] Kendall-Taylor, N., & Lindland, E. (2013). *Modernity, morals and more information.* Washington, DC: FrameWorks Institute.

[2] Kendall-Taylor, N., & Lindland, E. (2013). *Modernity, morals and more information.* Washington, DC: FrameWorks Institute.

[3] An additional 50 on-the-street interviews were conducted on the specific topic of child care in Hobart and Melbourne, with Persistence Trials to follow in May 2014. These findings are not included here and will be reported in a subsequent strategic document.

[4] Quinn, N., & Holland, D. (1987). Culture and cognition. In Holland, D. & Quinn, N. (Eds.), *Cultural models in language and thought* (pp. 3-40). New York, NY: Cambridge University Press.

[5] Kendall-Taylor, N., & Lindland, E. (2013). *Modernity, morals and more information.* Washington, DC: FrameWorks Institute.

[6] To read more about the cultural models described here please see: Kendall-Taylor, N., & Lindland, E. (2013). *Modernity, morals and more information.* Washington, DC: FrameWorks Institute.

[7] The data collection occurred between October 8 and October 30, 2013; the values portion included 2,800 respondents randomly assigned to one of the six value messages, or to a control group that received no message. In sampling, the respondents' demographics were matched to benchmarks taken from the Australian Bureau of Statistics. Specifically:

Age

18-34	25.5
35-49	23.8
50-64	29.3
65+	21.4

Education:

Doctoral Degree Level	0.8
Master Degree Level	3.9
Graduate/Master's/Doctoral Degree Level	7.1
Graduate Diploma Level	2.1
Bachelor Degree Level	31.6
Advanced Diploma and Associate Degree Level	6.9
High School Diploma Level	8.0
Certificate III & IV Level(c)	4.4
High School Diploma Level; Certificate III or IV	30.6
Other	4.6

Ancestry

English	33.2
Australian	34.6
Irish/Scottish	11.4
Italian	3.3
German	0.4
Chinese	4.9
Other	9.2

Political Party

Australian Labor Party	39
Coalition	34.8
Australian Greens	9.4
Other	16.8

[8] Kohler, W. (1929). *Gestalt psychology.* New York, NY: Liveright. Quoted in Lynd, R.S. (1946). *Knowledge for what: The place of social science in American culture.* Princeton, NJ: Princeton University Press (p. 12).

[9] A good example of this kind of reframing can be viewed in this collaboration between the University of Southern California's Interactive Media Program and the Harvard Center on the Developing Child, drawing from reframes supplied by the FrameWorks Institute: http://www.albertafamilywellness.org/resources/video/brain-hero

[10] Polletta, F. (1998). Contending stories: Narrative in social movements. *Qualitative Sociology 21*(4), 419-46.