



Brain Builder Workforces

The Neuro-informed Policy and Practice Framework

We are all Brain Builders

Every time we interact directly or indirectly, via systems and services, with a child, young person or their family we are helping to build brains. For this reason, understanding brain development is important in supporting children and young people to thrive.

We know that the best outcomes for children, families and society are achieved when individuals, communities, services and systems work together. Actions that are underpinned by a *shared purpose*, *shared knowledge* and *shared language* around brain development can foster a society that not only nurtures its future generations but also invests in its own long-term well-being and prosperity (see Figure 1 below).

The Neuro-informed Policy and Practice Framework is a tool that supports systems and services to establish a shared language, shared knowledge and shared purpose.

Framework development

The Neuro-informed Policy and Practice Framework was developed through an extensive scoping review of publications describing the application of neuro-informed policy and practice, internationally. A total of 116 academic and policy publications across health, education, law, social services, and built environments were synthesised to inform the development of a Neuro-informed Policy and Practice definition and to identify the knowledge bases that underpin its application. Please see the [Neuro-informed Policy and Practice Scoping Review Evidence Brief](#) for further details of the methods and outcomes of this review.



Figure 1: Shared language, shared knowledge, and shared purpose

What is neuro-informed policy and practice?

Neuro-informed policy and practice is the method and outcome of translating and applying current evidence from neuroscience and related field about the processes underpinning human development and behaviour to guide policy and practice actions.

The intent of neuro-informed policy and practice is to create and promote optimal conditions for Brain Health* and related positive physical, social, and community outcomes.

*Brain Health is defined by the World Health Organisation as: “the state of brain functioning across cognitive, sensory, social-emotional, behavioural, and motor domains, allowing a person to realize their full potential over the life course, irrespective of the presence or absence of disorders.”

Neuro-informed policy and practice

Does	Does not
• Connect current evidence from science with practice and policy • Consider the complexities of human relationships and contexts • Promote the importance of system, family and community-level supports	• View the brain and individual in isolation • Adopt a one size fits all approach • Disregard individual differences and circumstances • Overlook the role of systems and environments in supporting brain health.

Considering the brain in context

Understanding the brain within the context of the diverse social, physical and system environments in which they live is essential for making meaningful connections between scientific evidence and policy and practice actions (see Figure 2 below).

When we look at the brain in isolation, we do not consider other aspects that influence human functioning and behaviour. Similarly, focusing on the individual in

isolation does not consider broader contexts, and can over-emphasise the importance of personal responsibility for individual behaviours.

The Neuro-informed Policy and Practice Framework encourages us to recognise the complex and profound influence of social and physical environments and systems on brain development across the lifespan. That is, the connection from our cells to society.

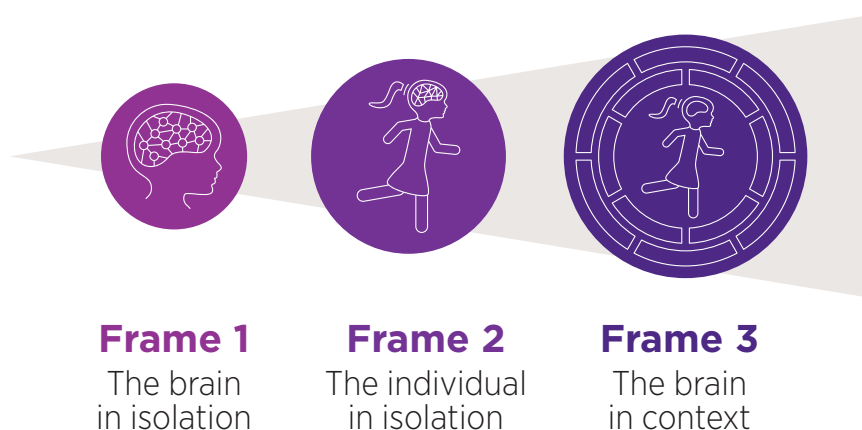


Figure 2: Framing of the applications of evidence from neuroscience into policy and practice

12 Key knowledge bases underpinning neuro-informed policy and practice

There are 12 key knowledge bases that underpin neuro-informed policy and practice. These knowledge bases reflect current applications across the fields of health, education, social services, law and physical environments. Each of the 12 knowledge bases, from cells to society, are shown in Figure 3 below.

The small text under each heading provides examples of the concepts identified under each component. These examples are not intended as exhaustive, but provide a start point for collating key messages, resources, and evidence that can be used in development of knowledge and practice applications across each of the 12 components.

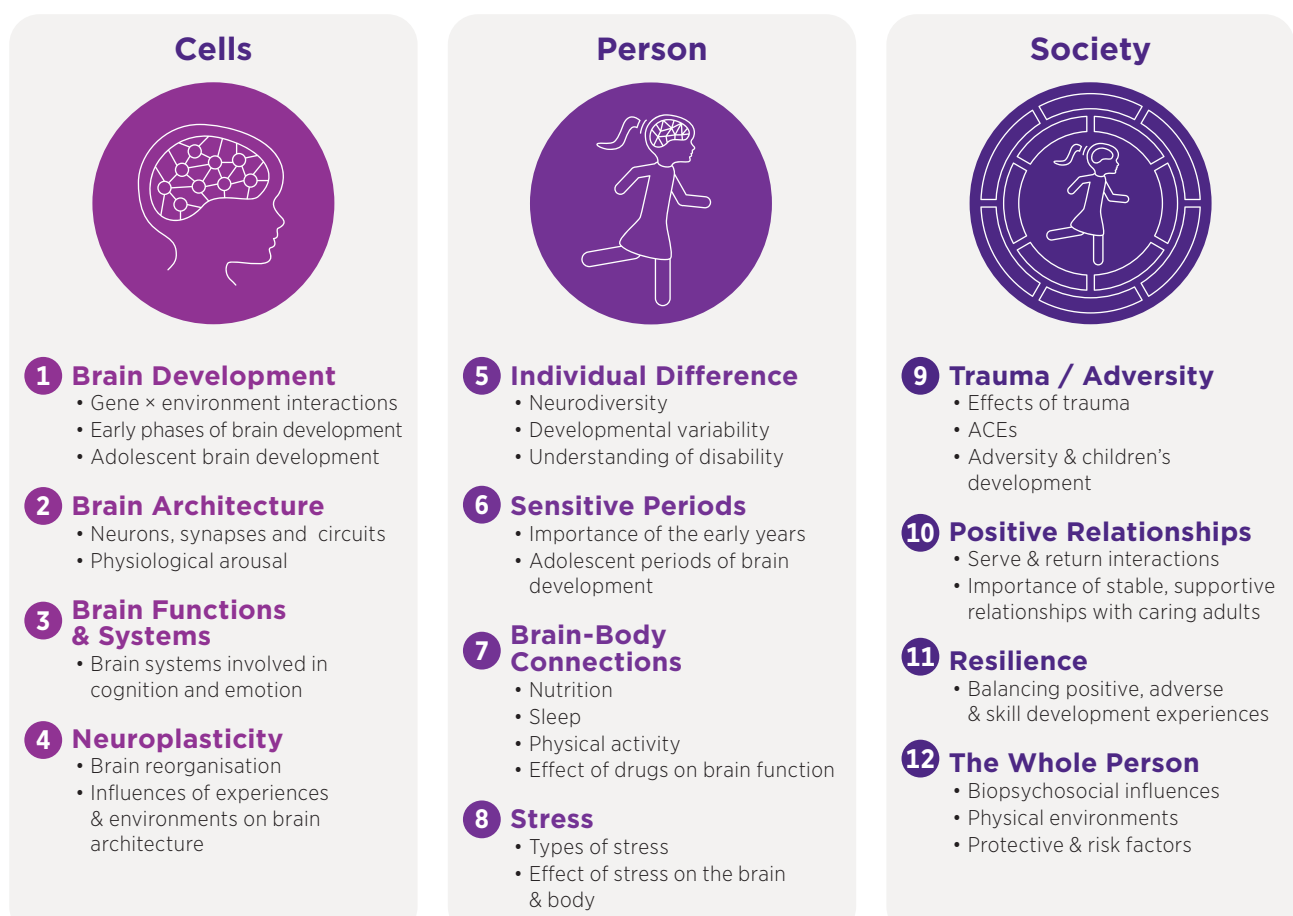


Figure 3: Twelve key knowledge bases, with examples, underpinning neuro-informed policy and practice.

Examples of key messages across each of the 12 neuro-informed policy and practice knowledge bases are provided in Figure 4 below.

	Key Knowledges	Key Messages
Cell 	Brain Development	Brains are built not born. Brains are shaped by the interaction of our genes and experiences over time.
	Brain Architecture	The foundations of brain architecture are constructed early in life.
	Brain Functions & Systems	Brain areas and systems serve different functions and are interconnected.
	Neuroplasticity	Brains continue to change throughout life in response to our environments and experiences.
Person 	Individual Difference	Brain health and development varies across individuals.
	Sensitive Periods	Pregnancy, the early years of life and adolescence are key opportunities to support lifelong development.
	Stress	Stress, in a variety of forms, affects the brain and body.
	Brain-body connection	Brains and bodies are interconnected.
Society 	Trauma & Adversity	Trauma and adversity can have profound effects on the brain and body.
	Positive relationships	Stable, safe, and responsive relationships are essential for brain health and development.
	Resilience	Resilience is underpinned by positive and adverse experiences, skills, and supports.
	Whole Person	Biological, psychological, social and physical environments interact (through services and systems) to influence brain health and development across time.

Figure 4: Twelve key knowledge bases and key messages of neuro-informed policy and practice.

Applying the Neuro-informed Policy and Practice Framework

The Neuro-informed Policy and Practice Framework can be applied across contexts and sectors and inform initiatives that encourage and support brain health and related physical, social and community outcomes.

Further Resources and Supports

There are a range of resources available to support learning and application of the Neuro-informed Policy and Practice Framework into action. See a full list of resources available on the [Brain Builders Initiative website](#)

Applications of this framework include, but are not limited to:



Guiding reviews and auditing of curriculum and training in tertiary settings, pre-service and post-service training, and in schools and other education contexts.



Assessing learning capabilities and development within and across workforces.



Promoting shared language, knowledge, and messaging across systems, communities, and workforces.



Providing new opportunities for conversations with workforces, colleagues, families, children and young people around brain health and brain development.



Informing policy and practice actions to ensure they are consistent with contemporary evidence.



Establishing a unifying framework that enables policymakers and practitioner workforces to create and promote optimal conditions that support brain health* and (or) related positive physical, social, and community outcomes.

Provoking conversations and reflections as part of discussions, meetings, communities of practice, forums and seminars.