

Developing Optimal Arousal for Learning and Engagement

‘Regulate to Educate’

Meeting Needs : at each level



A Framework for Understanding



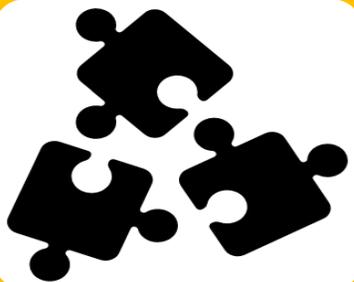
What Lens Are We Looking Through?

- How are we understanding the situation?
- Is our usual response effective?
- Are we looking through the child's eyes?
- What is the primary function ?



What Are the Unmet Needs or Unlearned Skills?

- Is the behaviour a learned response – conditioned ?
- Or does it show gaps in skills or basic needs?
- Which part of the brain is in charge ?
- Is this about need or want ?



What Problems Do We All Have to Solve?

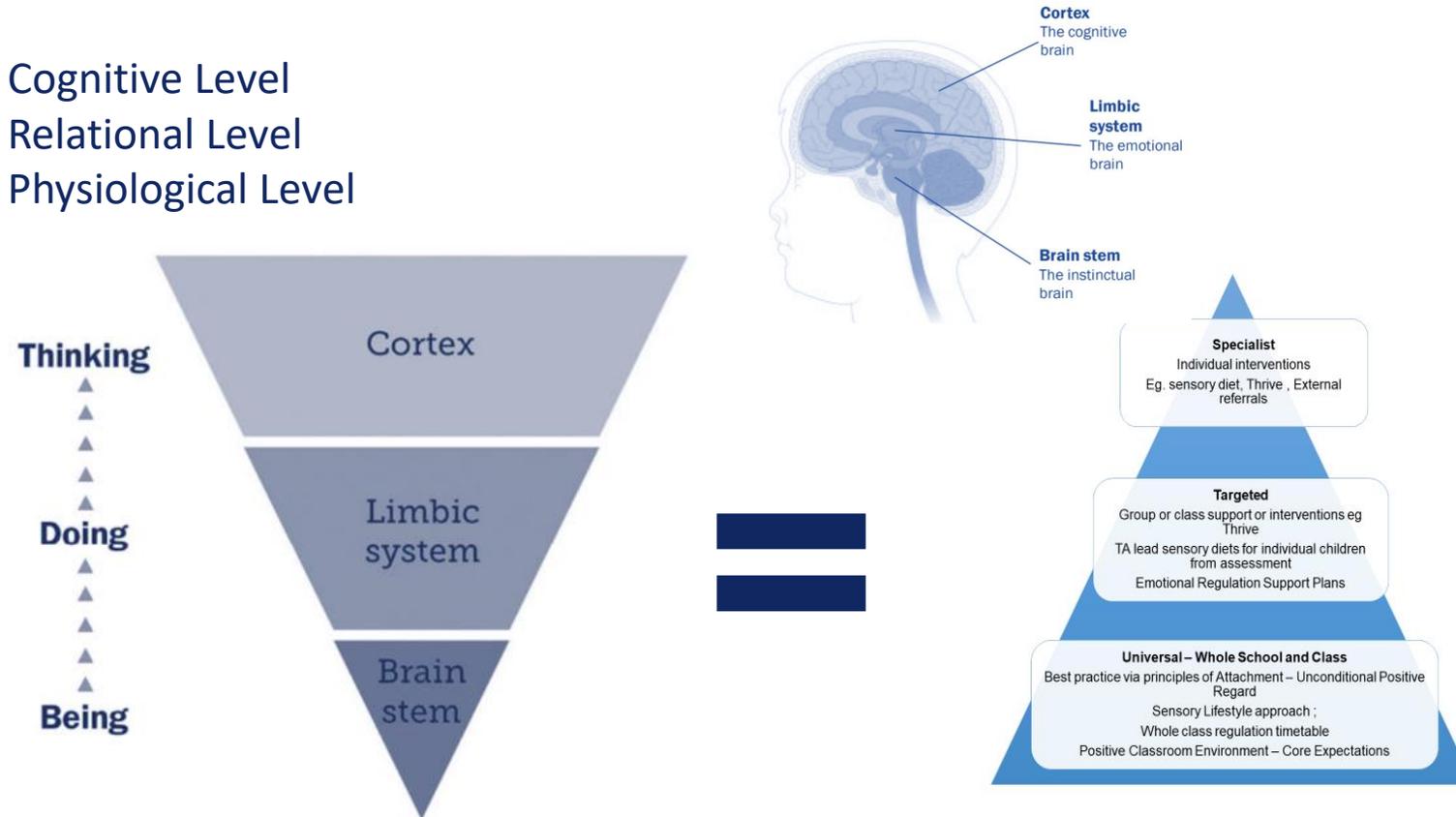
- Whose issue is it ?
- How can we help them learn necessary skills?
- Can we help their needs be met?
- How can we teach a better way – adapt

Where Is The CYP Operating From?

We need to understand the three part brain to inform our functional analysis of distress response

This understanding will allow us to support responses that affect a response at a

- Cognitive Level
- Relational Level
- Physiological Level



This determines where we need to target support...

Creating Adaptive Responses

- Our professional duty to understand how to optimise engagement
- Students will apply their own learned behaviours unless we teach them a more appropriate response
- Teaching child to comply isn't the same as them being intrinsically motivated to do so – (extrinsic vs intrinsic)
- If we keep responding in same way we will get same results
- Us managing behaviours is not the same as helping child to manage their own

The 'Triune Brain'

- A model of how our brain has evolved
- The brain can be subdivided into three parts
- Reptilian brain
- Limbic brain
- Prefrontal brain



THE
TRIUNE B



Building a learning brain : Use it or lose it

- Reptilian Brain Stem ; physiological - am I safe?
(instinct)
- Mammalian Limbic / emotional brain – am I loved?
(subconscious)
- Pre-Frontal brain / thinking - what is my place ?

So in summary...

- Reptilian brain
freeze'

- Limbic brain

- Prefrontal brain

} The 'Downstairs' Brain

The 'Upstairs' Brain

How Does this Relate to our Students ?

- In most of our children the **downstairs brain dominates** – wired differently
- Most children with SEN are profoundly ‘egocentric’ – no theory of mind
 - not concerned about their effect on others
- Asking our children to stop biting , kicking is like asking a 12 month old to stop crying
- Often children become hyperactive, over-sensitive and hyper-vigilant, and move quickly from anxiety to terror – HIGH ALERT
- The child is in a *persisting* fear state (*a state becomes a trait*) that causes exaggerated reactivity.

What we need to do

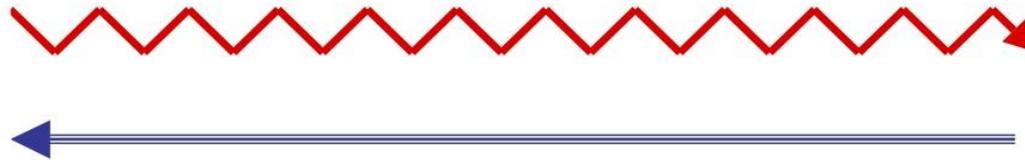
- When the downstairs brain is in control the upstairs brain switches off
- A child being 'controlled' by their downstairs brain cannot learn
- We need to *regulate* them first – **co regulation**
 - Addressing their basic biological needs - calms the *Reptilian* brain
 - *Relating* helps them control their emotions – this calms the *Limbic* brain.
- We then look to *teach alternatives* at an appropriate level – *Reason*

Effective Emotional Regulation

Child experiences catastrophic anxiety and terror.



Child cries



Child's emotions are regulated.

Adult soothes and thus communicates, verbally and non-verbally, that they recognise the feeling and it will be ok.

Parent briefly becomes anxious too

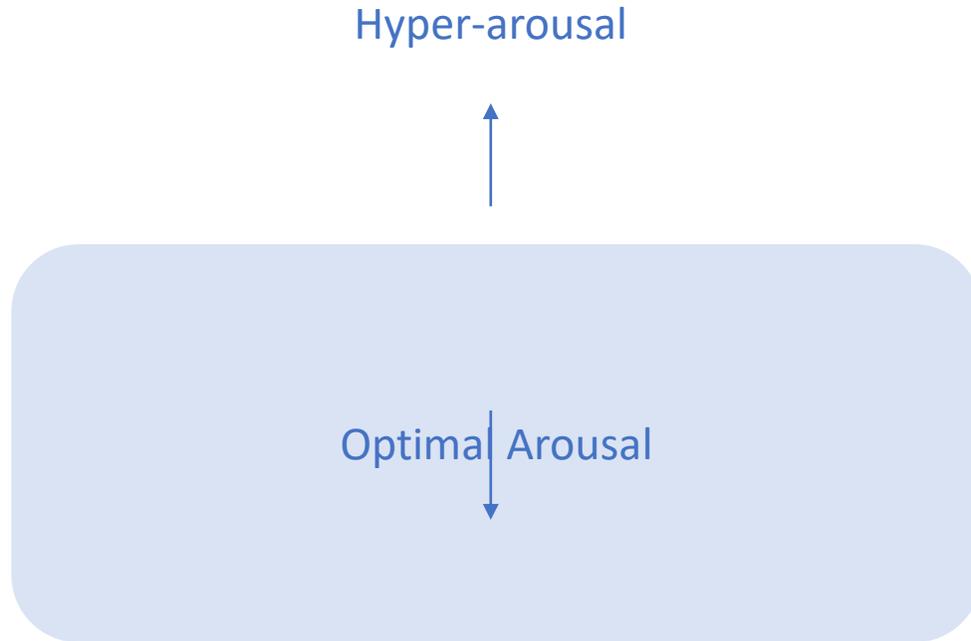


But

Manages their own emotions quite quickly. The adult can cope with it.

Over time, when the child experiences this on *most* occasions (it does not need to be all of the time) they acquire the capacity, through developing neural networks, to regulate their own emotions.

Developing CYP's Window of Tolerance



Fight or Flight Response

Hyper-arousal: When we detect danger, our body hits the accelerator, mobilising us physically for action by increasing our heart rate and providing us with energy to fight or flee.

Social Engagement Response

Optimal arousal: When we detect safety, we relax, recharge and become available. We are open to learning and responsive to those around us.

Freeze Response

Hypo-arousal: When we detect a threat to life, our body hits the brake, immobilising us by slowing down the body, reducing our heart rate and causing us to withdraw and shut down.

Creating optimal arousal

“The emotional brain, the limbic system, has the power to open or close access to learning, memory, and the ability to make novel connections,”
([Vail, 2017](#)).

Laughter IS the best medicine

Optimal balance for effective functioning and learning :

Dopamine:

For memory , attention and engagement

Serotonin:

Calms down dopamine , mood stabiliser

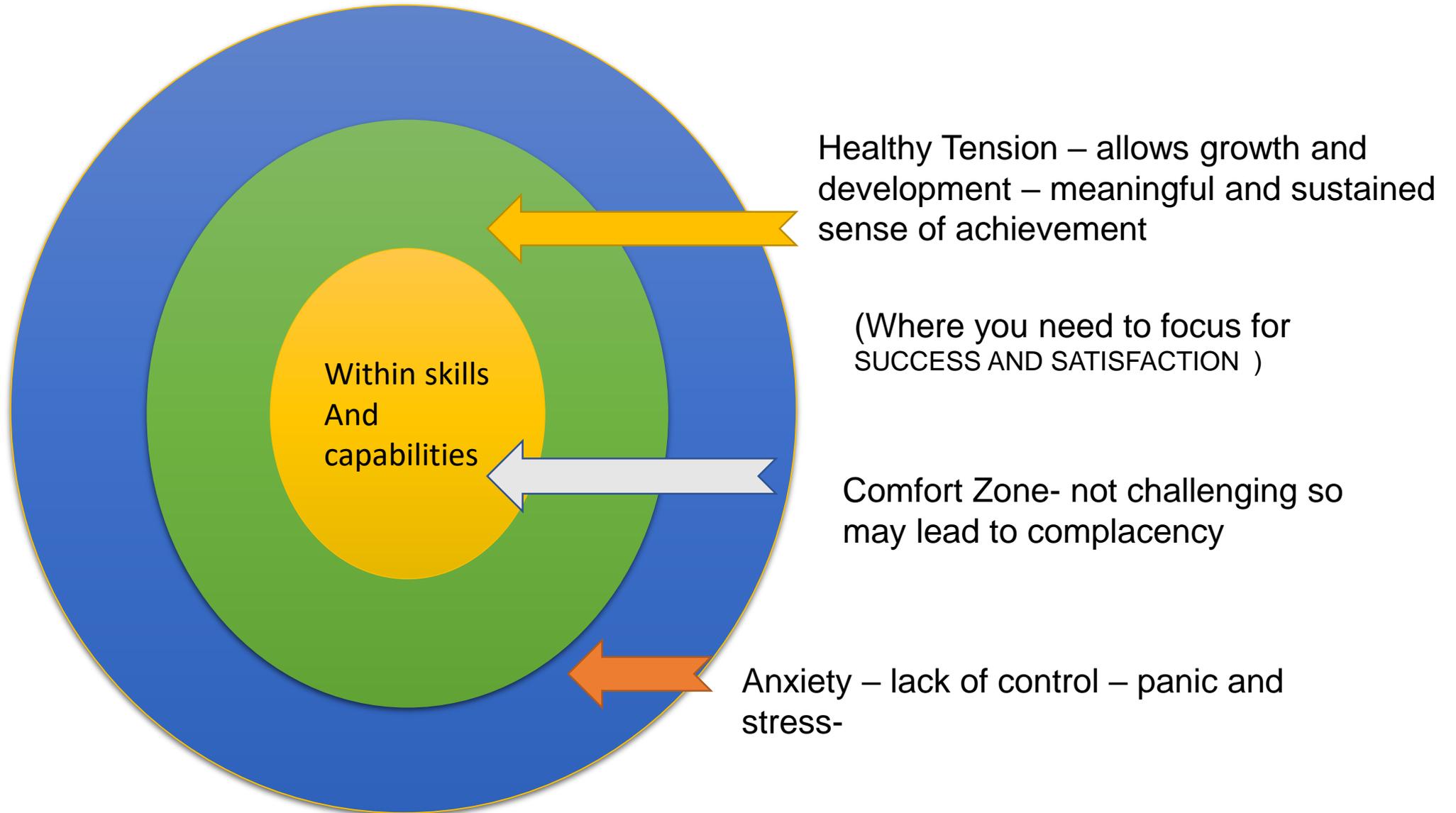
Oxytocin:

Love drug. Human need for connection – feel good

Cortisol:

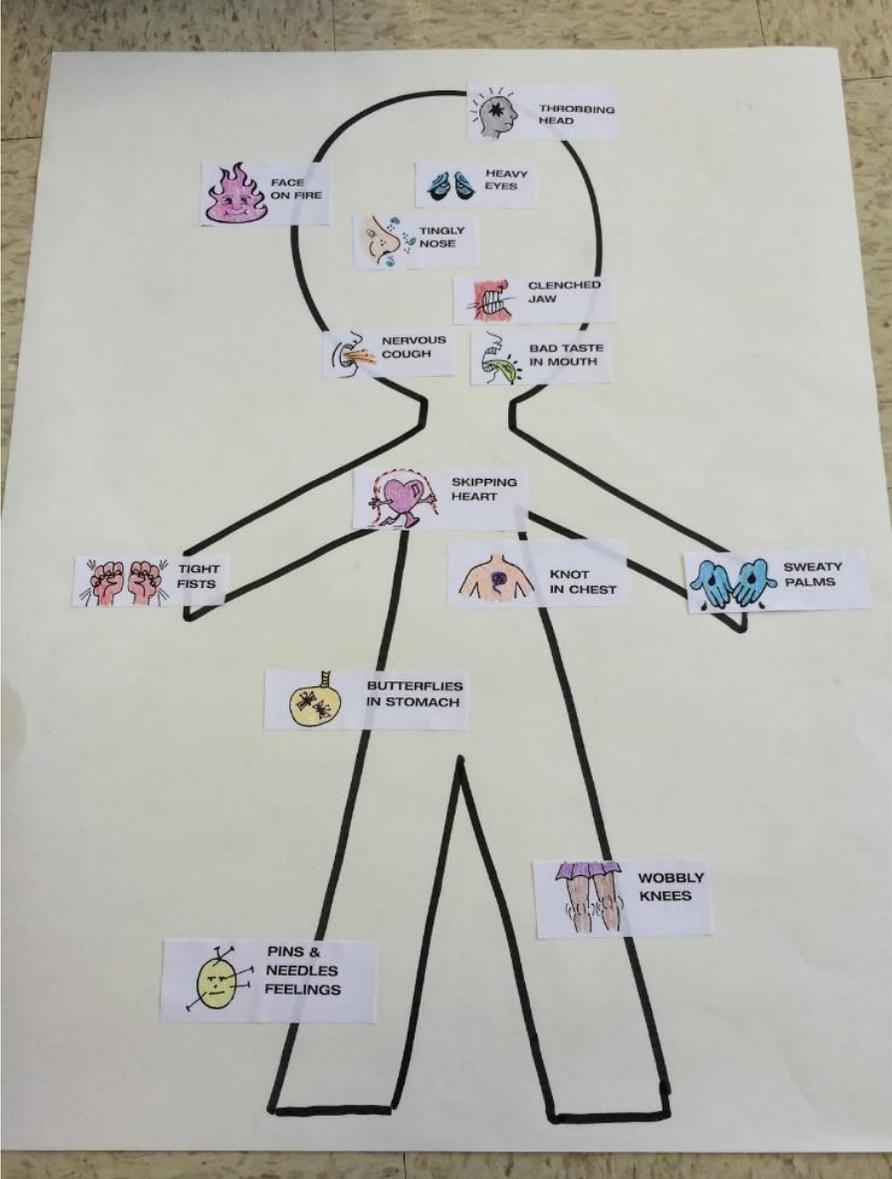
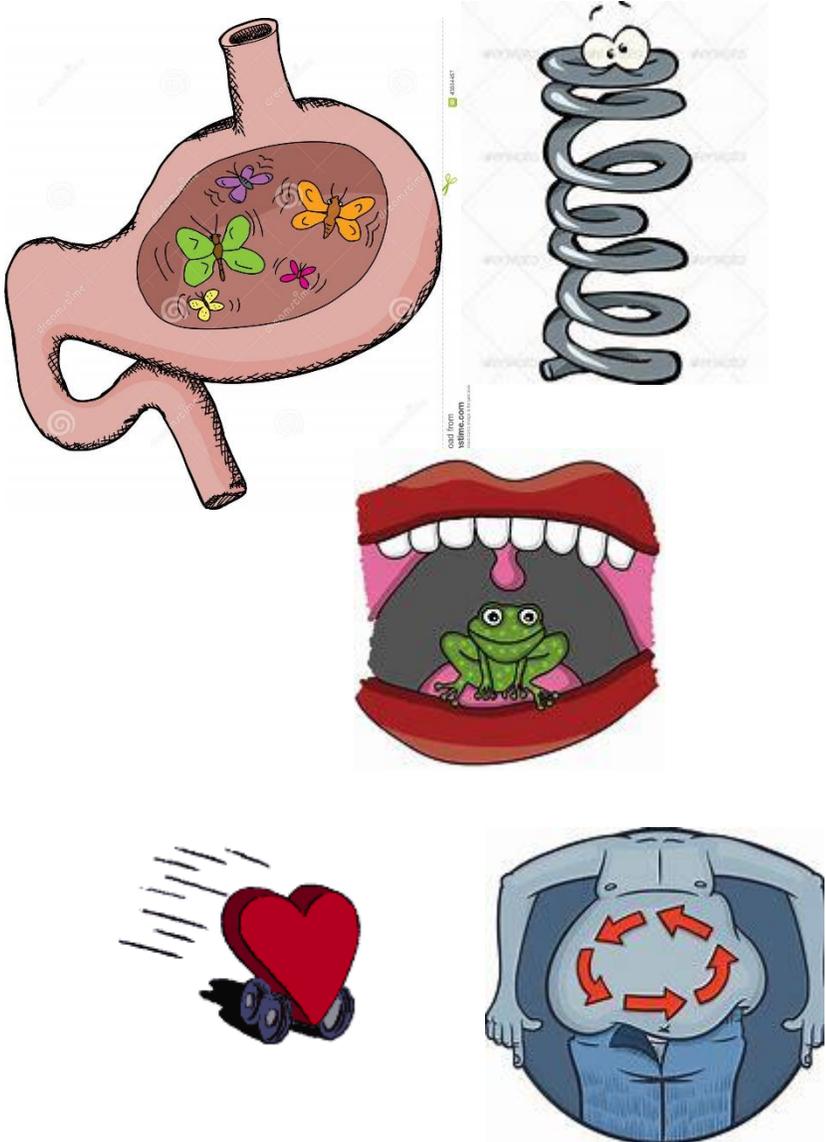
Stress hormone – healthy amount needed





Getting the Balance right for effective learning

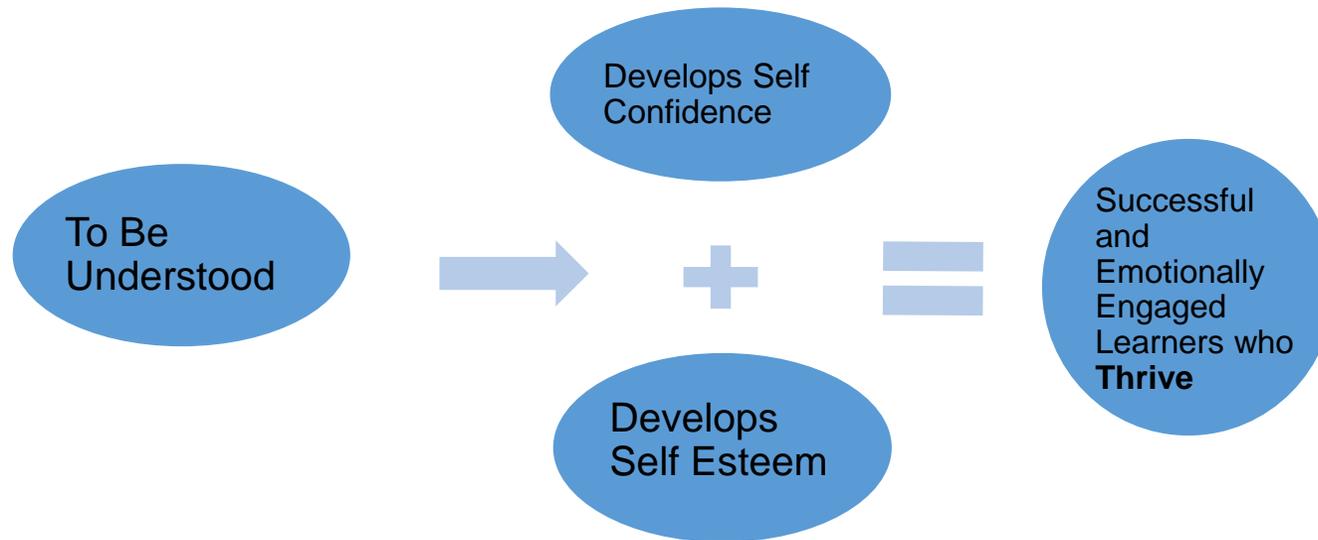
Locate and Label Emotions



Regulate to Educate at Newfield

Our Secret to Successful Lifelong Learning:

'Regulate to Educate' Philosophy underpinned by Neuro-sequential Model (Perry 2008)



Love, understanding and connection between us and the children is **the most important** factor in securing healthy learning.

Neuro-chemically children will have no option other than to learn.

Unconditional Positive Regard and Warmth for all pupils
Creating a secure and safe base for all pupils to thrive via the 3 R'S:

REGULATE , RELATE AND REASON.