The Window of Tolerance is a model founded in Neuroscience (the scientific study of the nervous system), which helps develop good practice for improving and maintaining mental health and wellbeing.

It offers a way of thinking about how we function optimally, in our various roles, and how to manage when heightened emotions begin to have a negative impact.

Like everyone, children’s emotions fluctuate, particularly at times of stress and crisis and in the height of emotion, they find it difficult to express what’s happening verbally. Physiological and behavioural changes provide the information we need to understand and support them. Recognising the signs that a child or young person is struggling with their emotions, helps us to support them. Using the Window of Tolerance is one way of doing this.

In this document:

- What is the window of tolerance?
- The river of wellbeing.
- Expanding the river.
- Supporting a child or young person to stay or return into their window of tolerance.
- Ideas for moving from chaos / hyper-arousal.
- Ideas for moving from rigidity / hypo-arousal.
- Tips on how to be present / in the moment.
- The healthy mind platter.
- How is your time spent?
- References and resources.
What is the Window of Tolerance?

Developed by Dan Siegel, a Clinical Professor of Psychiatry, the Window of Tolerance describes the best state of ‘arousal’ or stimulation in which we are able to function and thrive in everyday life. When we exist within this window, we are able to learn effectively, play, and relate well to ourselves and others.

However, if we move outside of our window we can become hyper-aroused or hypo-aroused.

Hyper-arousal results from the fight or flight response and is characterised by excessive activation/energy. It can present as difficulties concentrating, irritability, anger and angry outbursts, panic, constant anxiety, easily scared or startled, self-destructive behaviour, etc.

Hypo-arousal results from the freeze / flop drop response where there is a sense of shutting down or dissassociating. This can present as exhaustion, depression, flat affect, numbness and disconnection.

We all have different ‘windows’, due to factors such as: significant childhood experiences, our Neurobiology, social support, environment and coping skills. The size of our windows can change from day to day but the wider we can make the window, the less likely we are to experience anger, frustration or feel flat, low and lacking energy.
The River of Wellbeing

To think about these issues in another way, imagine canoeing down a river; the River of Wellbeing. On one side of the river is the bank of hyperarousal and chaos, and on the other side of the river is the bank of hypoarousal and rigidity. Some children and young people can 'bounce' from one bank to the other, experiencing difficulty finding the middle of the river. And this affects their ability to function effectively.

The wider the river, the more safe space is created the easier it is to deal with obstacles and challenges that arise.

One of the challenges is to help children develop self-awareness of their position in the river; sometimes the river will feel very narrow or be full of obstacles that tend to push them into a state of feeling overwhelmed or unable to regulate their emotions well (i.e. the banks of chaos or rigidity).

How to expand the river—using different techniques

One technique to help children expand the river, and therefore give themselves greater opportunity to be resilient and stay calm and focused, is by developing their self-awareness and with this, greater levels of adaptability, flexibility and independence. These are called Process Interventions. This would be like the canoeist having an idea of what obstacles to expect and the skills to be able to negotiate them. The more they practise their ability to anticipate and navigate obstacles, the more confident and empowered they will feel, and over time the river seems to get wider.

Another technique is to provide external supports and strategies, such as adapting the environment (e.g. sensory accommodations); building in predictability (e.g. visual timetables, structure, routines); and / or providing keyworker support (e.g. school-based ELSA time). These are called Compensation Interventions. Rather than the focus being on the canoeist developing their inner resources and skills, embankments would be built up; the canoe stabilised or perhaps a guide would work with them.
Supporting a child or young person to stay or return into their Window of Tolerance

The Coronavirus Pandemic has affected everyone. Feelings of anxiety and feeling unsettled are normal, healthy reactions to an abnormal and unique situation.

Research suggests there are 5 themes to consider when outlining the possible impact of Covid-19 lockdown on an individual: structure, routine, friendships, opportunities and freedom (Carpenter and Carpenter, 2020). These are useful themes to consider when investigating how to support children and young people at this time and what strategies might prove effective to broaden their river, enhance their canoeing skills and improve your effectiveness when supporting them.

1. Before you consider supporting another person, be aware of where you are in your window of tolerance. If you are outside of your window, you are not going to be able to effectively support another to be in theirs. If outside of your window, use strategies for yourself firstly.

   ‘a dysregulated adult cannot regulate a dysregulated child’

   Dr Lori Desautels

2. Explore the right foundations are in place. Sleep deprivation, poor nutrition, lack of exercise, physical pain or illness, substance misuse, underlying neurodevelopmental condition/s or underlying stress (e.g. from being bullied) are all likely to narrow the Window of Tolerance.

3. When supporting a child, try to understand their triggers. What tends to move them outside of their window? Examples include: being overly excited, sensory overload, peer problems, difficulty with written work or sustaining attention for long periods. ABC charts can be helpful for identifying themes and patterns. Are there any adaptations that can be made?

4. Understand what helps. What works to return one person to their Window of Tolerance, or the centre of the River of Wellbeing, may not work for someone else. As you explore and identify what helps, make a list that can then be shared with the child or young person and their family / school. Some of the strategies below may help to move from a hyper-aroused state as well as hypo-aroused depending on individual need.
Ideas for moving from chaos / hyper-arousal back within Window of Tolerance: where to start as an adult helping a child / young person

When a child is emotionally ‘offline’, begin with validation; self-soothing or self-regulating behaviours before trying to help them make sense of a situation. Allow for choice and control. A child needs to feel safe, understood and accepted (have emotional resonance). Also, remember what helps one person will be unique and individual. Skills need to be practised regularly and when the child is calm. When skills are familiar they are easier to use at times when they feel outside their window.

Exploration with a child, combined with observations and triangulating information, can help determine the triggers for dys-regulation, the child’s emotional response and which of the following strategies might prove helpful and meaningful to enhance resilience.

The Power of Breathing

The breath can be extremely effective for regulating emotions, especially when used with movement. However, not all children will respond well to using breathing techniques. If you think a focus on breathing may be useful to the child, then consider how you can build in some exercises as a proactive measure e.g. at the start of every school morning and afternoon, or at home before they leave for school.

1. **Diaphragmatic breathing** - also known as *belly breathing* or *abdominal breathing*. The belly rises on the in-breath and lowers on the outbreath. This allows effective use of oxygen as it reaches the lower parts of the lungs. Children can practise by placing a hand on their belly and feel the movement. A younger child could practise by lying on their back with a soft toy on their belly – giving the toy a ride as the belly goes up and then lowers.

2. **Square breathing** - combines regulating breath with a visual focus. Using an actual square shaped object (e.g. picture frame, table, window, book [it doesn’t need to be an exact square]) or an imaginary square shape, breathe in from one comer to another horizontally for a count of 4; hold breath from this point to the bottom comer for a count of 4; breathe out from this point moving horizontally for a count of 4; and hold breath moving up to the start point for a count of 4; and repeat.

3. **7/11 breathing** - Breathing in for a count of 7 and out for a count of 11. The longer outbreath triggers the parasympathetic response, which calms the body. For younger children 3/5 breathing can be used. Also blowing bubbles, making the blowing extended in length; and hot chocolate breath (imagining smelling the hot chocolate through the nose and cooling the drink by gently blowing out).

4. **Drinking from a straw** - This can aid attention and be soothing. This promotes one of the earliest forms of self-regulation – sucking on a dummy or a thumb (or breast-feeding).

5. **Progressive muscular relaxation (PMR)** - Tensing and releasing different parts of the body, usually in a systematic way. Tensing on the in-breath and releasing on the outbreath. Caution is needed for high blood pressure or for areas of recent surgery / injury. Research shows that the muscles are less tense following PMR and the proprioceptive sites in the body give feedback to the brain that the body is calmer. It is also useful as it is tangible (the physical nature of tensing and releasing). For younger children they could do a whole body tense and release, such as pretending to be a robot and then changing to a ragdoll.
6. **Finger breathing** - Sometimes called star breathing (using a star instead of a hand). With fingers outstretched use index finger of other hand to trace around the thumb and fingers of outstretched hand whilst breathing. From base of thumb to tip breathe in; from tip of thumb to base on the other side breathe out and so on. This can then be repeated on the other hand.

![Finger Breathing](image)

7. **Tracing and breathing** - Draw a shape on a piece of paper. As you breathe slowly in and out continue to trace the shape without lifting the pencil from the paper.

8. **Visualisation** – imagining going to a favourite place, such a beach or a meadow.

9. **Jumping on a trampoline** – movement and rhythm.

10. **Throwing a yoga / therapy ball against a wall** – movement and rhythm.

11. **Kicking or bouncing a ball**

12. **Shaking or stomping out excess energy** - a natural discharge during fight or flight is the use of energy. Exercise reduces adrenaline and cortisol (stress hormones) and increases the feel-good endorphins.

13. **Brisk walking / marching on the spot**

14. **Star jumps** – using two sides of the body (bilateral) to help integration.

15. **Large bilateral motor movements** - opening up the body, utilising both sides of the body helps to integrate the two sides of the brain. Consider crossing midline, using figure of 8 etc.

16. **Playing the drums** – movement, rhythm and sound.

17. **Stress / squeeze balls**

18. **Heavy work** (risk assessed) such as lifting, pulling, crab walking.

19. **Weighted blanket** - deep pressure stimulation of the body can increase the release of the feel good neurotransmitter serotonin in the brain.

20. **Rolling over yoga / therapy ball**

![Rolling over yoga ball](image)

21. **Opposite sides** – clicking the finger of one hand whilst simultaneously blinking the eye on the other side of the body and then alternating.

22. **Dual drawing** - co-regulator begins a drawing and the child does the next bit and then alternates – promotes connection.

23. **Bilateral scribbling to beat of music** - having a crayon in both hands (2 different colours) and scribbling to music.
24. **Warm water** - can feel soothing (warmth can reduce adrenaline and increase oxytocin).

25. **Music (soothing and calming music and sounds)** - utilising the sense of hearing with rhythm can relax the mind and body. Can be used to accompany breath work, movement and / or PMR. Music could be graded from a higher tempo to lower tempo to gradually regulate. Audios of different sounds could be played. For example, some people like the sound of the sea, a stream, a crackling fire, birds, etc.

26. **Capturing sound** - listening out for the different sounds in their environment, imagine having a net to catch each sound as they arise.

27. **54321** - using the 5 main senses for bringing attention – 5 things they can see; 4 they can feel; 3 they can hear; 2 they can smell (or imagine) and 1 they can taste (or imagine).

28. **Sensation wall / feeling phrases** - a sensation wall is an area in the classroom with words that describe sensations of feelings. This can be helpful as language is difficult to access when dysregulated but a child could point to the sensation they feel in the body. Examples include empty, rattled, tense, jumpy, jittery, or knotted. Pictures can accompany this such as an empty plastic bottle, a rattle, a knotted rope. The ‘language of the brain stem is sensation.'

### Ideas for moving from rigidity / hypo-arousal back within Window of Tolerance

1. Anything that stimulates the senses.
2. Smell is the fastest way to the thinking brain.
3. Chewy, crunchy food.
4. Use of a sensory shaker.
5. Sensory bin - an area where there are various sensory toys.
7. Rolling a pencil between palms.
10. Weighted blanket.
11. Feeling the soles of the feet on the floor or the body sat on a chair, noticing how the body is supported.

12. Dance and music.
13. Small movements gradually getting bigger (wiggling toes) – ‘breathe through your nose, wiggle the toes’.
15. Gently sitting or bouncing on a trampoline or yoga / therapy ball.
16. Finger tracing – see labyrinth picture.
17. Finger painting.
18. Water play with a straw - blowing out through a straw encourages diaphragm involvement.
19. **54321** – see above.
The brain develops from the back to the front and from inside to out. When emotionally dys-regulated it is the brain stem and limbic areas which are activated. This results in the deactivation of the frontal cortex, which is responsible for executive functions, including attention and impulse control. Any intervention and support you offer therefore needs to be targeted at safety and connection (brain stem and limbic system) and not at a cognitive, language-based level.

It is therefore essential that the supporting person is present and able to engage emotionally. This requires attending to their own needs first, including the basics of sleep, nutrition, stress and pain management.

Consider a daily brief mindfulness practice so that you can bring awareness to your own inner experience. This is also an opportunity to ask the self-compassion question ‘what do I need right now?’

Family support and school structure play a key role in welcoming students back to school effectively. This is the time when children and young people will need adults around them to be in attendance, to be mindful of subtle changes in their behaviour (non-verbal communication) and to be actively watching and listening, helping to subtly evaluate and support their window of tolerance. This might mean paying attention when making breakfast, discussing the timetable for the day, walking to school, welcoming a student into their bubble, supervising during break time, facilitating a group, leading a parachute game, saying farewell at home time, tucking into bed at night.

It is important to be authentic and transparent, modelling behaviours for regulation. ‘Be the change you want to see’. A child can sense that something is off. If a parent / teacher says everything is okay when they themselves are stressed, the child may think ‘is my body lying to me, or are they lying to me?’ This can lead to not trusting their own internal systems (Dr Reggie Melone). When a child feels a sense of belonging, is sure they are valued for who they are and would be missed if they weren’t there, regulation becomes a much easier act to discuss and perform.

An example of modelling is a parent or teacher stating: ‘I am going to do some grounding techniques right now because I can feel I’m a little out of whack’, or, ‘let’s all try some breathing exercises this morning and help get ourselves ready to start a new day / at school’.

When supporting someone who is dysregulated use grounding techniques yourself. Ask yourself: ‘who am I being?’ rather than ‘what am I doing?’

Demonstrate to the child that you see and hear them, through eye contact, gestures and posture, and tone of voice. (Depending on which body of research you access our attention to communication varies but they all agree non-verbal communication is the most significant, with around 93% of our communication being non-verbal).

"Attention is the rarest and purest form of generosity"

Simone Weil (philosopher)
"When the crowded Vietnamese refugee boats met with storms or pirates, if everyone panicked all would be lost. But if even one person on the boat remained calm and centred, it was enough. It showed the way for everyone to survive."

Thich Nhat Hanh
Thus far, we have explored strategies and approaches for children and young people (as well as ourselves) to return to the Window of Tolerance. The Healthy Mind Platter is a framework that can be used to help maintain the river of wellbeing.

Developed by David Rock and Dan Siegel, the Healthy Mind Platter is based on affective and Social neuroscience, clinical practice, behavioural research, and psychology. It identifies 7 areas which strengthen the brain’s internal connections; strengthens connecting with other people; and improves integration, which leads to a healthy mind.

Consider using the Healthy Mind Platter to help children reflect on what their day/week looks like at home and at school, and make sure you’ve planned a broad and balanced range of opportunities. As we emerge from lockdown and return to school, we would expect to have greater opportunities to recover and reconnect so think about the amount of focus time expected for the first few weeks and enhance opportunities on offer to children and young people in other areas.

At home, prioritise re-establishing a healthy sleep pattern and a normal routine for school. Model active listening and gentle talks over dinner that discuss how everyone has spent their day, and how this has felt for everyone.

Schools can consider introducing new group-based activities every morning and afternoon to focus on the Window of Tolerance together e.g. mindfulness exercises, breathing etc. Think of new ways to remind children of just how connected everyone is at school and foster a sense of belonging e.g. introduce a time to clap for your school. Keep your classroom doors open, stay in your bubbles and have a designated time where everyone at school stands up and claps to end the day together.
Everyone is different so the balance will differ and will also depend on the age of the person. The 7 areas are: Sleep, Physical time, Focus time, Play time, Connecting time, Down time, and Time in.
Sleep

When we give the brain the rest it needs to consolidate learning and recover from the experiences of the day. Sufficient sleep helps concentration, emotional wellbeing, learning and behaviour.

Physical time

When we move our bodies, aerobically if possible, which strengthens the brain in many ways. Exercise improves mood, reduces stress and anxiety and increase focus.

Focus time

When we closely focus on tasks in a goal-orientated way, taking on challenges that make deep connections in the brain. Concentrating on solving problems, writing essays, studying, etc.

Play time

When we allow ourselves to be spontaneous and creative, playfully enjoying novel experiences, which helps make new connections in the brain. Joking, being silly, having fun.

Connecting time

When we connect with other people, ideally in person, or take time to appreciate our connection to the natural world around us, richly activating the brain’s relational circuitry. Gratitude, generosity and giving back.

Down time

When we are non-focused without any specific goal, and let our mind wander or simply relax, which helps our brain recharge. Chilling out. An important part of consolidating learning.

Time in

When we quietly reflect internally, focusing on sensations, images, feelings and thoughts, helping to better integrate the brain. Mindfulness and self-awareness activities.

How is your time spent?

If we get the balance of mental health and wellbeing right, look after ourselves and model how we do this effectively, then children and young people will feel better able to regulate their own window of tolerance and talk to trusted others when they have something they feel unable to navigate independently.

References and resources

The Psychology & Wellbeing Service have produced a variety of information booklets, which include guidance for sleeping well and mindfulness. Check out our web pages on Gov.je to explore more resources and links to support materials.


Desautels, L. (2017) Brain Aligned Strategies: Addressing the emotional, social and academic health of all students

Melrose, R. (2013) The 60 Seconds Fix


