

Autism Spectrum PLD

Supporting students with ASD

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September 2020

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Session Goals

Part 1 = What is autism?

What are the changes in ASD diagnosis? Looking at the key areas of ASD in terms of our understanding and our practical supports

Part 2 Planning = What are the processes and strategies at school for supporting students with ASD?

Some practical differentiations (**what and how??**) and adaptations that you can use in your area of teaching? What does the school need that is new or different from now? Example – resources, ...

Overall goals from me are:

1. Understanding of autism and supporting students who have autism.
2. Understanding the importance of visuals as a learning pathway.
3. The '3 Ps' - key support people, key safe places and key processes for student learning
4. Thinking about school-wide systems development around ASD in your school.

Planning template for ASD (ANXIETY can occur across all areas and contexts)

Executive functioning – sequencing, thinking, planning, time, ...	Strengths and interests – student voice	Social and communication – friends, buddies, practice when calm
Repetitive and restricted Rigid thinking, fixated, ...	Lunchbreaks / transitions - where, who, what,	Name
Health – eating, drinking, gut problems, medication	School planning Student goals vs adult goals Plan B – safety, illness, <u>relievers</u>	
Sensory – touch, taste, smell, hearing, vision – key times and places / Supportive strategies include.....	Emotional Self-regulation (ESR) Adult dependent – co-dependent – independent. Triggers, times, transitions, places, <u>relievers</u> , ...	Learning – tasks, adaptations, differentiation, supports, Student agency – What are the student's goals? How do they know?

TKI- Inclusive Education

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COMMUNITIES

SCHOOLS

**Inclusive
Education**

Guides



ASD and learning

POPULAR

Support the learning and wellbeing of students with Autism Spectrum Disorder (ASD) across all levels of the curriculum.

[Read four strategies →](#)

Areas to plan for as teachers and parents

From the latest American Psychiatric Associations DSM 5

1. Social and communication difficulties

Persistent deficits in social communication and social interaction across multiple contexts.

2. Repetitive and restrictive behaviours

Restricted, repetitive patterns of behavior, interests, or activities.

Also includes Sensory sensitivities – touch, light, sound, taste, smell

**** Anxiety can be omnipresent and can make the other symptoms worse. Lower student anxiety and some symptoms may disappear.**

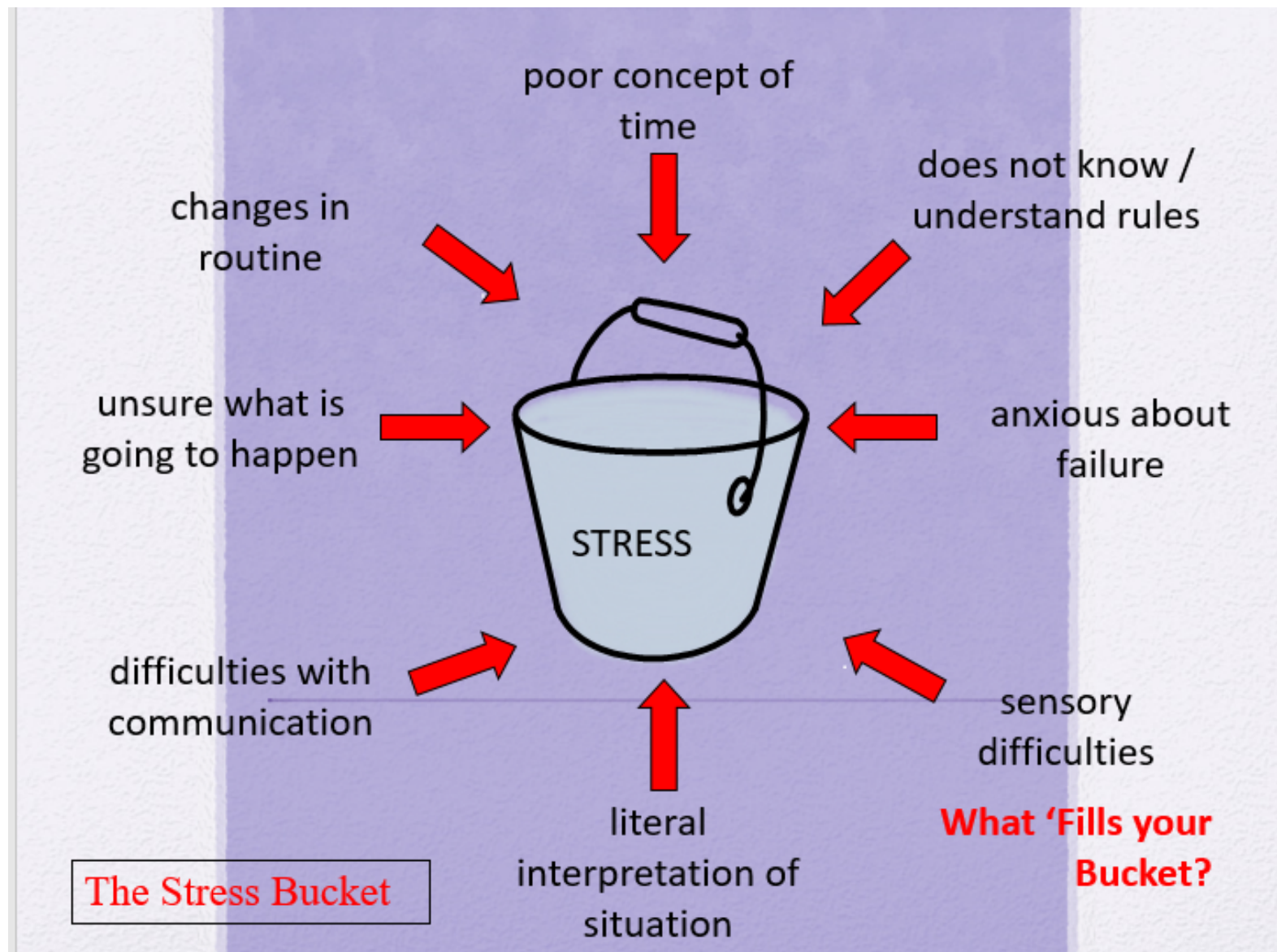
Challenges in thinking/Executive Functioning

-Executive functioning – **thinking** - organising, sequencing, processing, planning, impulse control, etc...



-Central Coherence – **small details** to big picture thinking

-Theory of Mind – taking others **perspectives**. “Don’t you know what I am thinking?”



Executive Functions – time and sequencing

Can the student sequence their day, learning tasks, timetable?



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Challenges functionally across contexts

Autism and IQ

Students with autism who have normal or high intelligence still face significant challenges.

Their IQ leads teachers and others to make assumptions about their ability to function in the classroom, at home or in the community.

However, intelligence or cognitive function is not a good predictor of how autistic students will cope with basic daily skills and tasks such as dressing, managing their school work, coping with sport, whole class activities, catching the bus, having resilience or managing failure.

In a recent study of over 2000 individuals in Western Australia, researchers found that on average, autistic children with no intellectual disability have functional scores 28 points below their IQ. By contrast, children with intellectual disability have functional scores only 4.5 points below their IQ, on average.

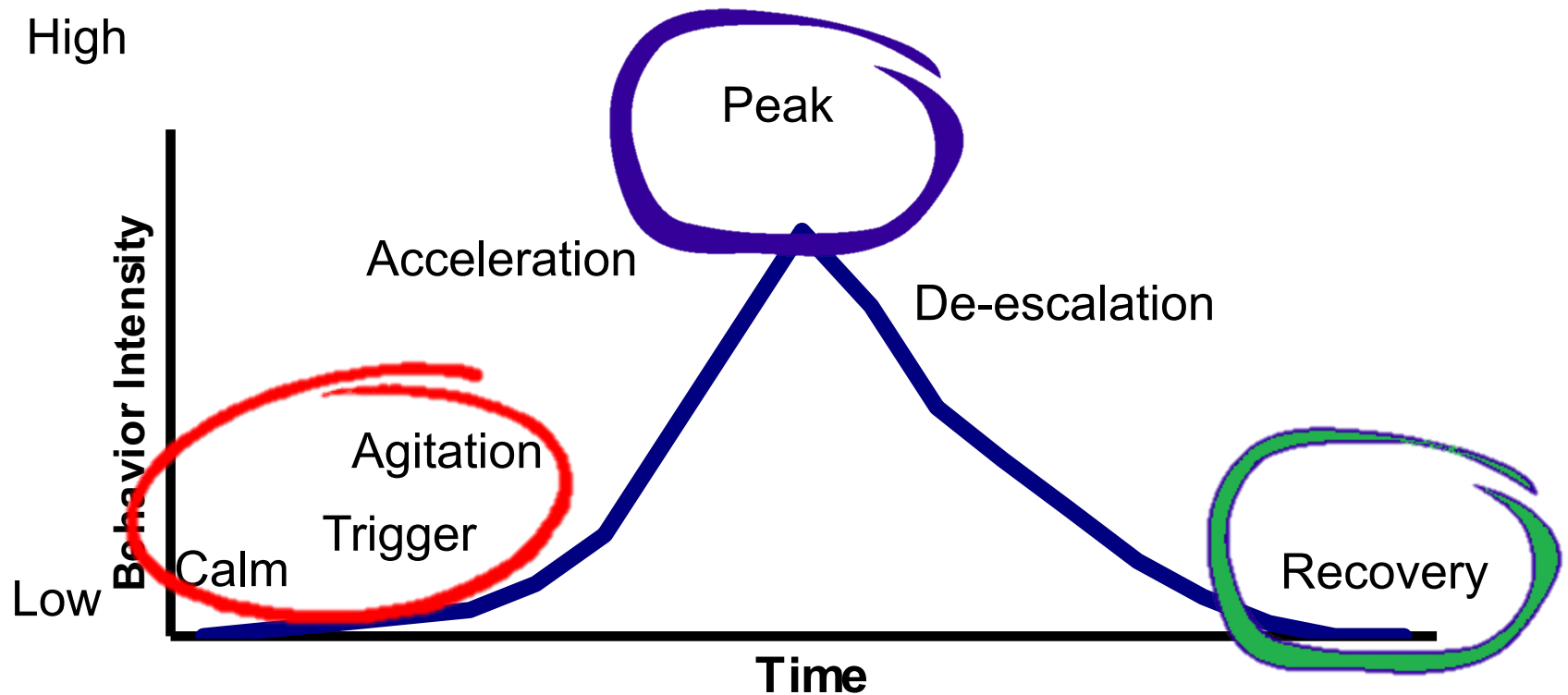
This means that despite being capable of achieving academically, they need significant additional support to manage day to day tasks, organize themselves and understand the social challenges of classrooms and schools. There are many successful strategies that can help.

The Australian research is to be published in the latest issue of the journal Autism, but is available online. Amares et al. (2019) The misnomer of 'high functioning autism': *Intelligence is an imprecise predictor of functional abilities at diagnosis*. Autism. First published online 18 June 2019

Challenges with self regulation:

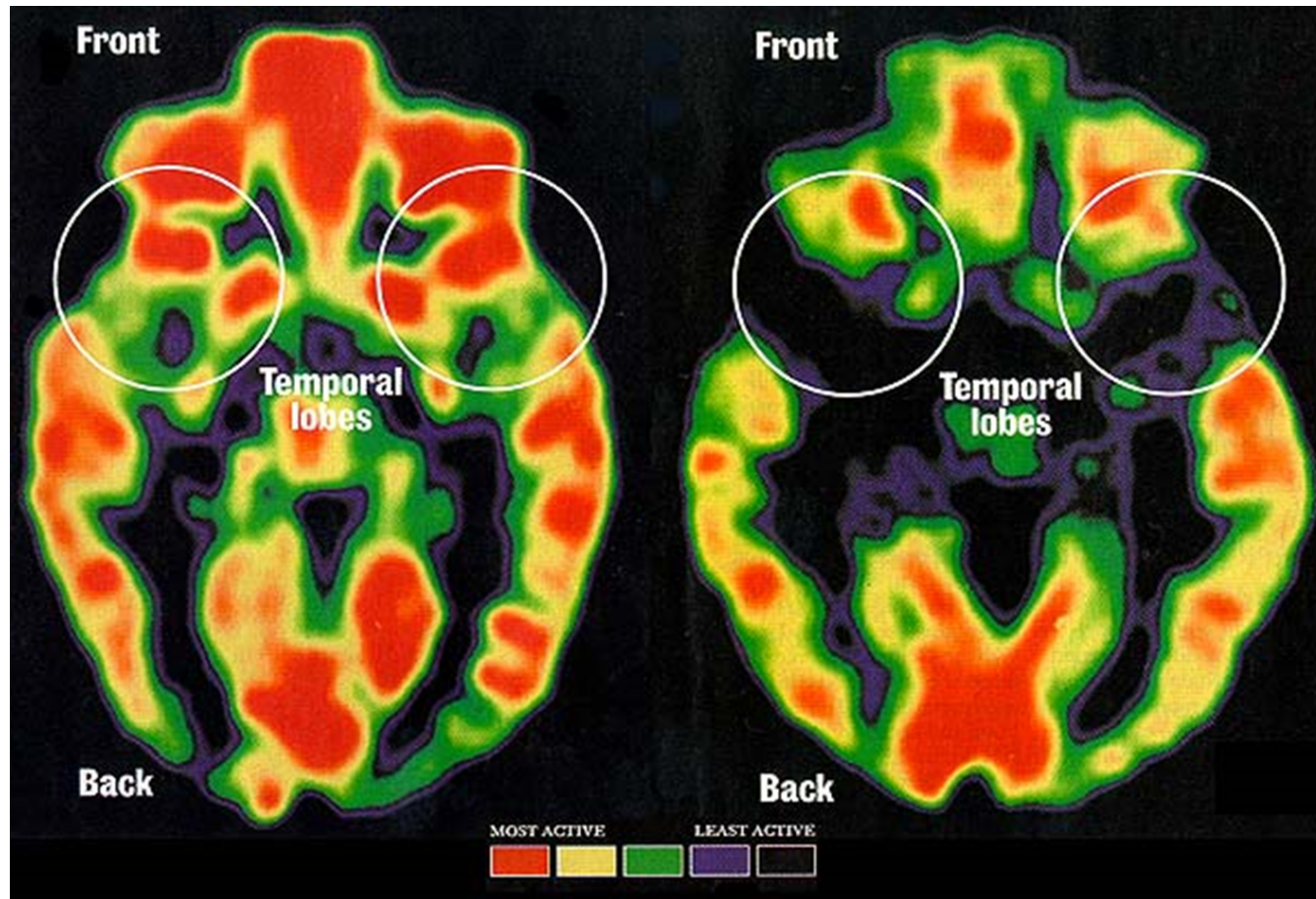
Emotional Escalation Scale

*Behaviour vs
physiology?*

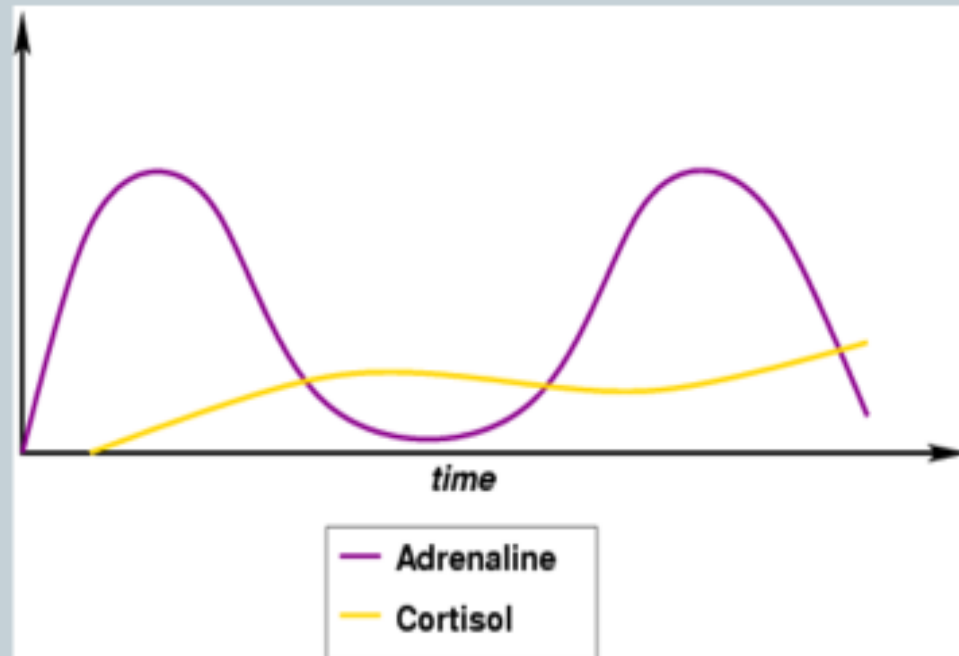


Colvin & Sugai, 1989

A different way of seeing this.



Adrenalin and Cortisol



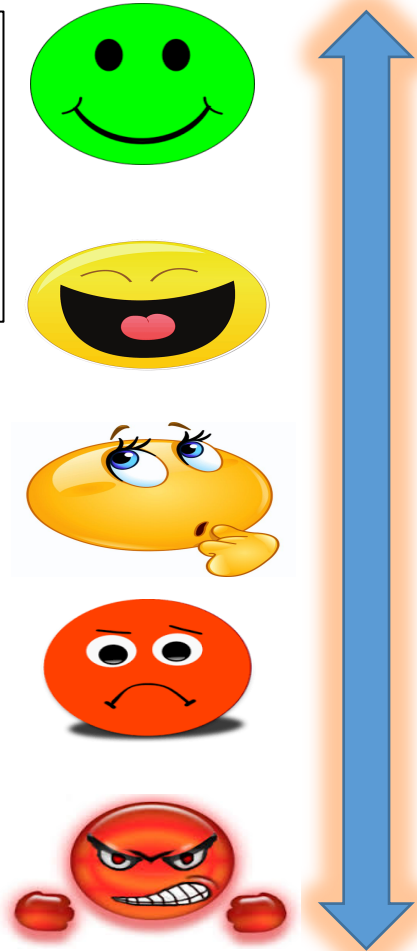
The Gatekeepers of Learning

- **Emotion**: “Emotion and cognition work seamlessly in the brain to guide learning. Positive emotions improve long term recall. Negative emotions disrupt learning and can leave the student with little or no recall after a learning event.”
- **Motivation**: The presence of positive motivation “increases the likelihood that students will engage in deeper learning.”

(TKI, OECD, 2012)

Upstairs Brain and Downstairs Brain

My **upstairs brain** is in charge when I am happy, thinking, making good choices, learning and playing with friends



This slide fits with the 5 point scale and the Zones of Regulation programme

My **downstairs brain** is in charge when I am angry, upset, not thinking clearly, making poor choices, not learning and being angry with friends

THE **ZONES** OF REGULATION®

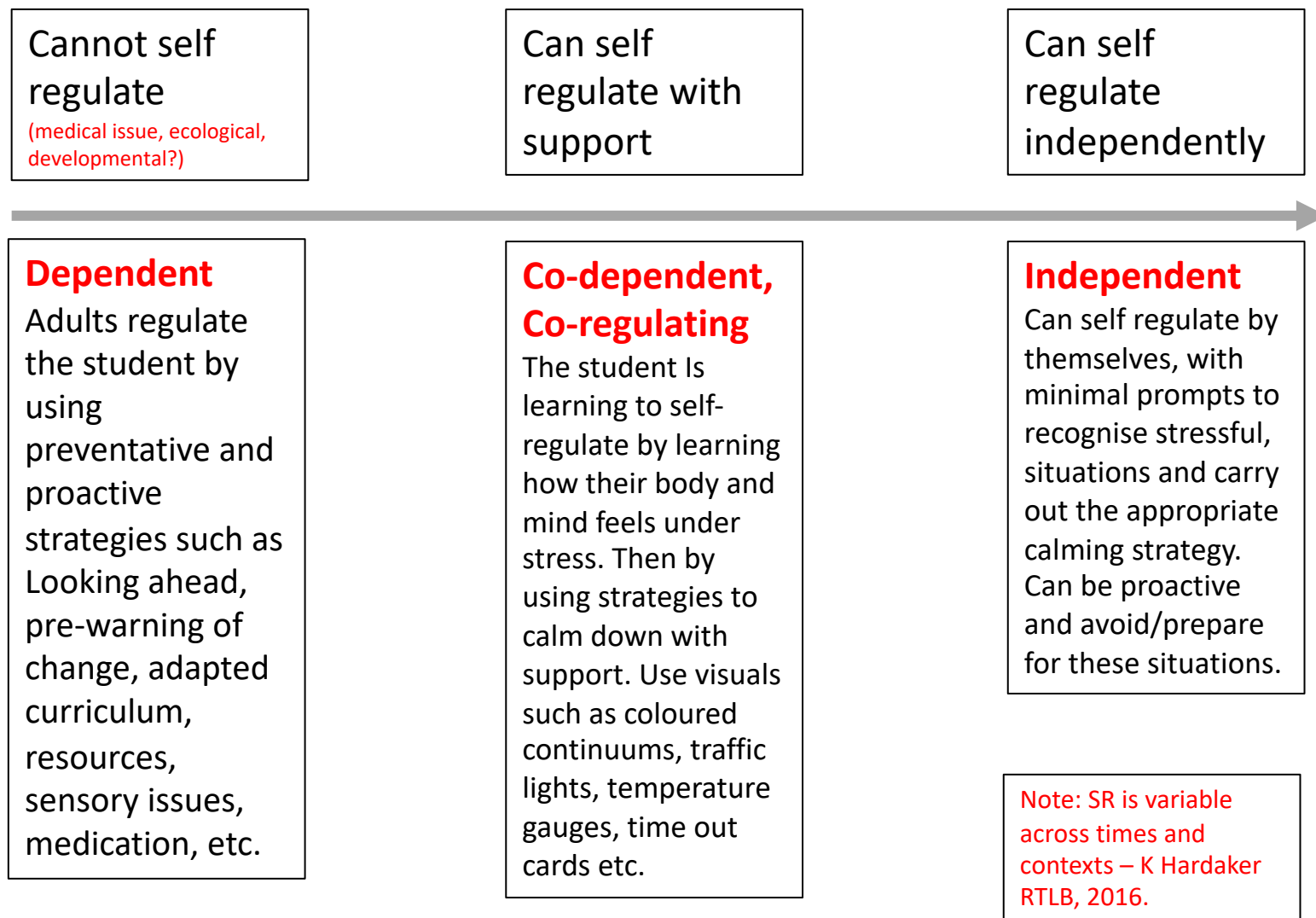
A CURRICULUM DESIGNED
TO FOSTER SELF-REGULATION AND
EMOTIONAL CONTROL

Written and Created by
Leah M. Kuypers, MA Ed. OTR/L

Foreword and Selected Lessons by
Michelle Garcia Winner



Ability to self-regulate emotional levels - Key planning point here is that you must start from where the student is now and identify the next step in ESR





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Name _____ Date _____

HOW WELL AM I MANAGING MYSELF NOW and WHERE WOULD I LIKE TO BE ON THE SCALE?

In Class

I always need adult support to stay calm.
I need adults to help me understand how I feel when I am stressed.

I am able to stay calm on my own in some places. I need some support to use my strategies to calm down when I am stressed.

I understand when I am feeling stressed and am always able to use my strategies to calm down independently.

1 2 3 4 5 6 7 8 9 10

In the playground

I always need adult support to stay calm.
I need adults to help me understand how I feel when I am stressed.

I am able to stay calm on my own in some places. I need some support to use my strategies to calm down when I am stressed.

I understand when I am feeling stressed and am always able to use my strategies to calm down independently.

1 2 3 4 5 6 7 8 9 10

How does my body and my head feel when I am ?











Emotional Thermometer



Mad Angry
Aggressive
Out of Control

Worried-Lonely
Scared-Anxious
Losing Control

Happy - In control
Calm - Relaxed
Ready to learn

Sad - Sick -Tired
Unhappy
No energy

Visuals

The importance of visuals

Blog Maureen Bennie October 8, 2017

<https://autismawarenesscentre.com/visual-supports-best-way-use/>

“People on the autism spectrum tend to learn best using visual supports rather than through auditory input. Seeing it, rather than saying it, helps the person retain and process information. Temple Grandin, the most famous woman in the world with autism, describes being a visual thinker in her excellent book Thinking in Pictures.”



Strengths - Visual processing power / first language?

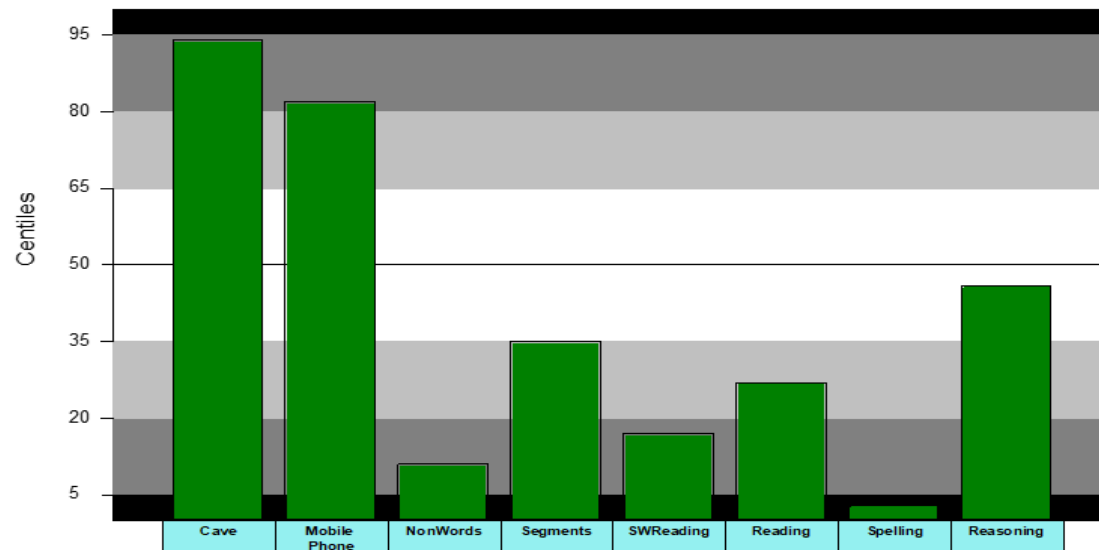
LASS ID: STAALA405OPO

D.O.B: 01/12/2005

Date printed: 10/08/17

Module	Score	Centile	Std Score	Z Score	ZScore difference	Discrepancy	Test date	Test age	Age equiv. range
Cave	38	94	124	1.555	1.66	+ (p < 0.01)	10/08/17	11 y 8 m	12y +
Mobile Phone	10	82	113	0.915	1.02	+ (p < 0.01)	10/08/17	11 y 8 m	11y 6m - 11y 11m
NonWords	16	11	82	-1.227	1.13	- (p < 0.01)	10/08/17	11 y 8 m	8y 0m - 8y 5m
Segments	31	35	94	-0.385	0.29	Not significant	10/08/17	11 y 8 m	10y 6m - 10y 11m
SWReading	42	17	86	-0.954	0.85	- (p < 0.05)	10/08/17	11 y 8 m	Not applicable
Reading	74	27	91	-0.613	0.51	Not significant	10/08/17	11 y 8 m	10y 0m - 10y 5m
Spelling	51	3	72	-1.88	1.78	- (p < 0.001)	10/08/17	11 y 8 m	8y 0m - 8y 5m
Reasoning	46	46	98	-0.1	-	-	10/08/17	11 y 8 m	10y 6m - 10y 11m

Profiles should be interpreted in accordance with the manual.



Cave is a visual spatial memory diagnostic test.

Mobile Phone is a measure of auditory sequential memory involving digit span (diagnostic test).

NonWords is a diagnostic test of phonic decoding skills.

Segments is a test of syllable and phoneme deletion identifying phonological processing ability.

Single Word Reading is an attainment test involving the reading of individual words out of context.

Reading is an attainment measure involving a cloze reading task (finding the missing word in a sentence).

Spelling is an attainment task which involves the spelling of single words.

Reasoning is an ability test giving a measure of non-verbal intelligence.

Challenges - Sensory processing

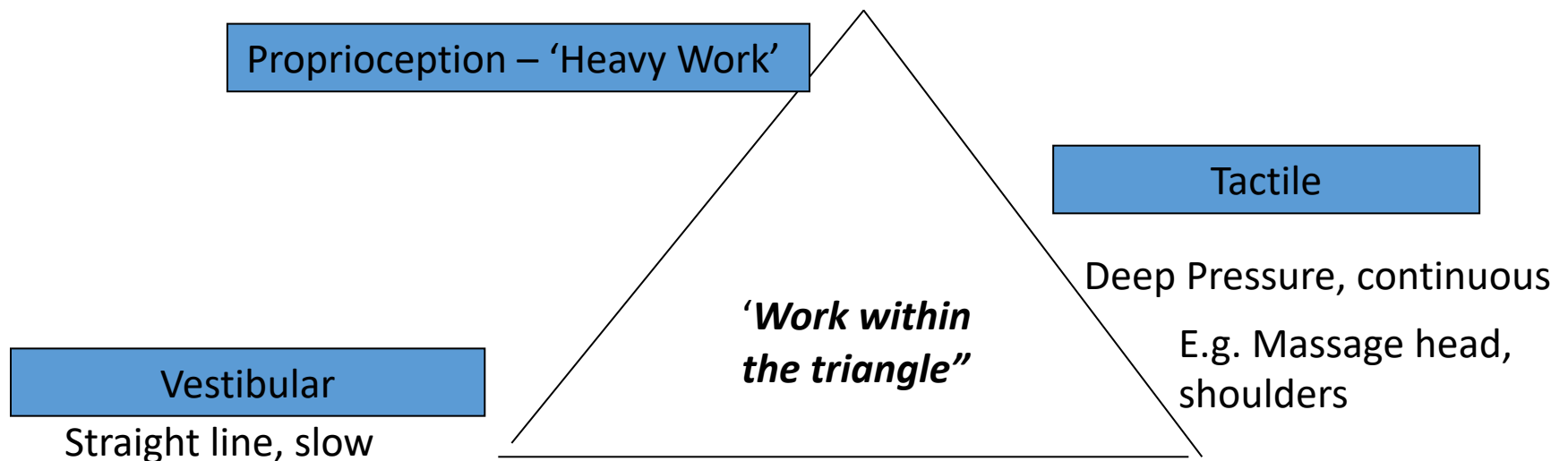
THE SEVEN SENSES

- AUDITORY - Hearing
- VISUAL - Sight
- VESTIBULAR - Movement
- TACTILE - Touch (both light touch and deep pressure touch)
- OLFACTORY - Smell
- GUSTATORY - Taste
- PROPRIOPCEPTION – This refers to sensory information telling us about the position, force, direction and movement of our own body parts



Sensory - Generally – to calm - (Nelson CDS – from the Red Zone PLD)

- Deep pressure and proprioception are calming
- Slow, rhythmical movement in a straight line is calming (vestibular)
- Soft textures with firm pressure is calming. (Tactile)



Your planning starts here



Planning template for ASD (ANXIETY can occur across all areas and contexts)

Executive functioning – sequencing, thinking, planning, time, ...	Strengths and interests – student voice	Social and communication – friends, buddies, practice when calm
Repetitive and restricted Rigid thinking, fixated, ...	Lunchbreaks / transitions - where, who, what,	Name
	Health – eating, drinking, gut problems, medication	
	School planning Student goals vs adult goals Plan B – safety, illness, <u>relievers</u>	Home school communication – How? Cultural perspectives, gender,
Sensory – touch, taste, smell, hearing, vision – key times and places / Supportive strategies include.....	Emotional Self-regulation (ESR) Adult dependent – co-dependent – independent. Triggers, times, transitions, places, <u>relievers</u> , ...	Learning – tasks, adaptations, differentiation, supports, Student agency – What are the student's goals? How do they know?

Your focus - planning

The 3 P's - Anchoring to key.....

people (Trust – adults and peers)

places (classroom, safe place, lunchtime)

processes (routines, visuals, transitions, sensory release, trips, etc.)

Planning – TKI Autism Spectrum Disorder

Useful resources



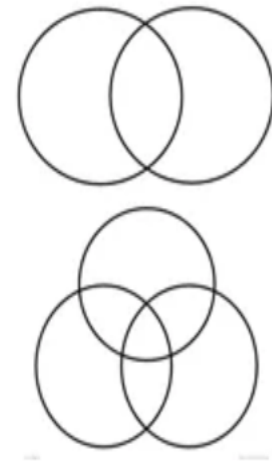
Graphic organizers

Publisher: For The Teachers

[Visit website ↗](#)

Venn Diagram

- 2 or 3 overlapping circles, used to show what is alike and different about 2 or 3 different things
- Simple enough for many primary students
- Materials/Resources:
 - [Venn Diagram \(Word\)](#)
 - [Venn Diagram \(pdf\)](#)
 - [Venn Diagram Sample – Cats and Dogs](#)



Self-Esteem

Student goals and self-esteem?

From Tony Attwood:

Brain science – look to the power of success, rather than a pattern of failure and anxiety. Neural pathways.

How does the student tell us about their successes and therefore themselves? – verbally, pictures, photos, from whanau, through writing, etc.....

Social skills – prepared peers / social replays / role plays / preparation
– priming for new experiences / home communication / visuals



School ASD Profile for:

Name

Date:

Strengths and interests:

Social and communication: How communication works best, oral language- receptive language ability vs expressive. What are the social challenges and next teaching steps?

Learning and Executive Functioning: Curriculum Levels - adaptations/differentiation of programmes| Exec functioning - Self-organization, sequencing, asking for help, multi-tasking. Strategies - (use visuals) timetables, breakdown tasks - step by step, tools, buddy, mind maps, low stress, special interests.

Clips

Jake: Math prodigy proud of his autism

https://www.youtube.com/watch?v=OR36jrx_L44

Carly's cafe autism

<http://theinspirationroom.com/daily/2012/carlys-cafe-for-autism/>



Stephen Wiltshire – Urban Artist who has Autism



Strategies that support a student with ASD to be calm, happy and learning.

- ***The 3 P's - Anchoring to key *people* (Trust), *places* (classroom, safe place) and *processes* (routines, visuals, transitions)***
- **Positive relationships** – calmness = learning. Anxiety = less learning
- **Research** shows we are strong **visual learners** – t.v., iPads etc. and poor auditory
- **Learning processes - visuals**, timetables, mind maps, written tasks in **sequence**, 1,2,3, Simplify, ... when and then,
- **Strengths – and special interests** – how to incorporate and share with the class?
- **Explain** – what am I doing, why and how long? – where is this detail heading into a **bigger picture**.
- **Social and communication**: talk slower (**90% are visual not auditory learners**), calm, check for clarity, give **processing time**, use visuals (this is a photo of the museum and here is a map). **Watch lunch/break times/transitions** that are unstructured and chaotic to a person with ASD, comic strip chats, role-play.

- **Sensory needs:** time out – quiet time – active time – hands on time – music time - as a part of the programme, teach awareness of escalations – i.e. traffic lights – temp gauge, how does your engine run. Headphones, exercise, dance, fidget toys, pressure jacket, Swiss balls, quiet corner, hugs, swinging, rhythm, pushing - pulling, a spare desk, a dark corner, a sensory room.
- **Prior warning - changes to routine / relieving teachers,** trips, swimming, x-country, etc. – lets anxiety settle and gives time for discussion
- **Triggers and signs of escalation** – this goes alongside all the supports
- Be a detective, never assume!
- Parents as experts

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