

# **Infinity Learning Maps, Trends & Support**

## **Auckland Regional August 2020**

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# Current state

- **What is going on in your world?**
- **Where are you up to with the LMTS project?**

## Term 3 possibilities

- **Thinking behind Map 2, an overview**
- **A lift in sophistication from Map 1**
- **More teaching practice than phase 1**

# **Step up**

## **Students understanding Reflection in Learning**

- **Make meaning of experiences**
- **Grow understanding and knowledge**
- **Improve next attempts**

# How?

## Reflection in learning

- **Via progressions in curriculum areas**
- **Via the interactive web surrounding each student's learning (using learning maps)**

<https://bit.ly/InteractiveWebInfinity>



# Teacher analysis of trends

\* Reading — more words  
 \* spelling  
 punctuation  
 \* focus / distraction  
 Practice.  
 WORK HARD.

Look at your learning map. What do you want to change, grow or develop about how you are learning?	What will YOU do differently to make this change or these changes to how you are learning? How will you make the change?	TEACHER- Talk to your teacher about your change. What can they do differently to help you with your change?	FAMILY Talk to someone in your family about your change. What can they do to help you with your change?
Say the word in my head before I write it down.	Take my time.	Remind me when I spell something to take my time	My family can tell me before I go to school to take my time.
to work harder on my writing spelling and reading	not to talk as much and stay focused	to tell me to stop talking	to talk to them about it
Shorten my writing to an easier length to read.	Use less words.	Give me a word limit so I don't use as many words.	Remind me not to get carried away and write so many words.
I tried	practice	make sure I have made my change	help me practice
Understanding hard words.	I will pronounce and read the word until I get the word right.	Help me understand the word and give me books to challenge me.	Mum and Dad can give me clues and tell me the meaning.
I want to read more fluently and write more quicker to get my work done quicker.	Read and write every night before I go to sleep.	They could put practising handwriting on our literacy planner.	They could remind me to do it every night
to do my work when I'm meant to.	tell my friends to stop talking to while I'm working.	If I forget to do my work ask me to get going on it	show them my work I've just dun in my work
spiling	proof reading		
Work on my spelling.	Get a spelling book and practice writing.	When I ask for help with spelling a word the teacher will help me sound it out.	When Mum or Dad has free time I will ask then to help me with my spelling.
Try not to sit by friends as much	sit away and try not to talk to them as much	help me when needed and keep me on track	talk to me when i need helph
Do abit more reading in my spare time.	Try read chapter books and harder books than usual.	Maybe read at home.	To keep me on track and give me good books to read.
i like to play games to help me learn	i will focus more on my learning and understanding my techers	my techers helps me with my maths litchery writing and reading	my mum and family helps me
Try not muck around and focus a bit more.	Try different strats and not sit with my friends so much.	To help me keep on track and not get detracted	Help when i am behind in school
to re-read more often	to think more when i'm checking my work so I remember those things	to help me proof read when I need too	for my friend to not annoy me and my family to give me there ideas

Want deliberate strategies



# Teacher analysis of trends

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Try not to sit by friends as much	sit away and try not to talk to them as much	help me when needed and keep me on track	talk to me when i need help
Do abit more reading in my spare time.	Try read chapter books and harder books than usual.	Maybe read at home.	To keep me on track and give me good books to read.
i like to play games to help me learn	i will focus more on my learning and understanding my techers	my techers helps me with my maths litchery writing and reading	my mum and family helps me
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Quick time  
11

Learning  
work

take it for me  
do it for me  
not enough sharing

1111  
Share

help  
1111  
1111  
1111

Share

help  
help  
help  
R.  
help  
help

Share

Here

Handwriting

Homework  
1111

writing

Maths

Read  
1111  
1111

Remind  
1111

# Learning Maps, Trends & Support



Trends  
From  
Map 1

Trends for

- Our whole class to work on
- Helping us to move from what is happening to what we would like to happen.

- **Sitting and working with my friends *to* Involving more people in my learning who don't distract me.**
- **From being distracted *to* Getting the job finished.**
- **From taking easier options *to* challenging myself to create quality work.**



# Learning Maps, Trends & Support



Trends  
From  
Map 2

Trends for

- Our whole class to work on
- Helping us to move from what is happening to what we would like to happen.

- From being unfocussed in work **to** being more focussed during learning.
- From running out of time for my work **to** using my time more wisely.
- From doing the basic work **to** adding detail to make my work quality.

"Do the mahi before the pārekareka"

\* Sit in an appropriate area.  
That is suitable for the task.

\* Don't distract others.

\* wanted more time to finish work.  
\* families to listen and ask questions about work.

Using time  
wisely

\* Choose people to work with who are focussed.

\* Walk away from distractions.

- 1. Recognise the silliness
- 2. Tell yourself to walk away.  
(the thinking part & brain).

Get it finished at School.

- walk away
- focus on work.

↳ Eyes, head are on your work.

↳ keep looking at task board. (to do list).

Stick  
to  
it!!

- Plan our day:  
- order it.

- Write it down  
↳ CB or Papers

- Steps numbers.

Self managing:

↳ ordering your time

Productive  
Priorities.

↳ leave the  
tiring till  
last!

# Learning Trends

Fernridge, Masterton



**Learning from  
others**



**Others learning  
from us**

**Understand  
the tools**



**Using tools to help us  
learn**

**Learning  
with peers**



**Learning with peers,  
teachers, teacher  
aides and whānau**

**I understand I  
belong to a  
family**



**I want my family to  
be involved in my  
learning**



# Learning Trends

Annan & Wootton, 2016



Passive ↔ Active

Shy ↔ Confident

Time on my hands ↔ Valuing time to learn

Social connections ↔ Learning connections

<http://bit.ly/studentchange>

<http://bit.ly/teacherchange>

<http://bit.ly/parentchange>



# The New Zealand Curriculum

## Directions for Learning

### Vision

Young people who will be confident, connected,  
actively involved, lifelong learners.

### Values

Excellence;  
Innovation, inquiry,  
and curiosity;  
Diversity;  
Equity;  
Community and  
participation;  
Ecological  
sustainability;  
Integrity;  
Respect.

### Key Competencies

Thinking;  
Using language,  
symbols, and texts;  
Managing self;  
Relating to others;  
Participating and  
contributing.

### Learning Areas

English;  
The arts;  
Health and physical  
education;  
Learning languages;  
Mathematics and  
statistics;  
Science;  
Social sciences;  
Technology.  
Official languages

### Achievement Objectives

High expectation  
Inclusion, Learning

cultural diversity,  
engagement,



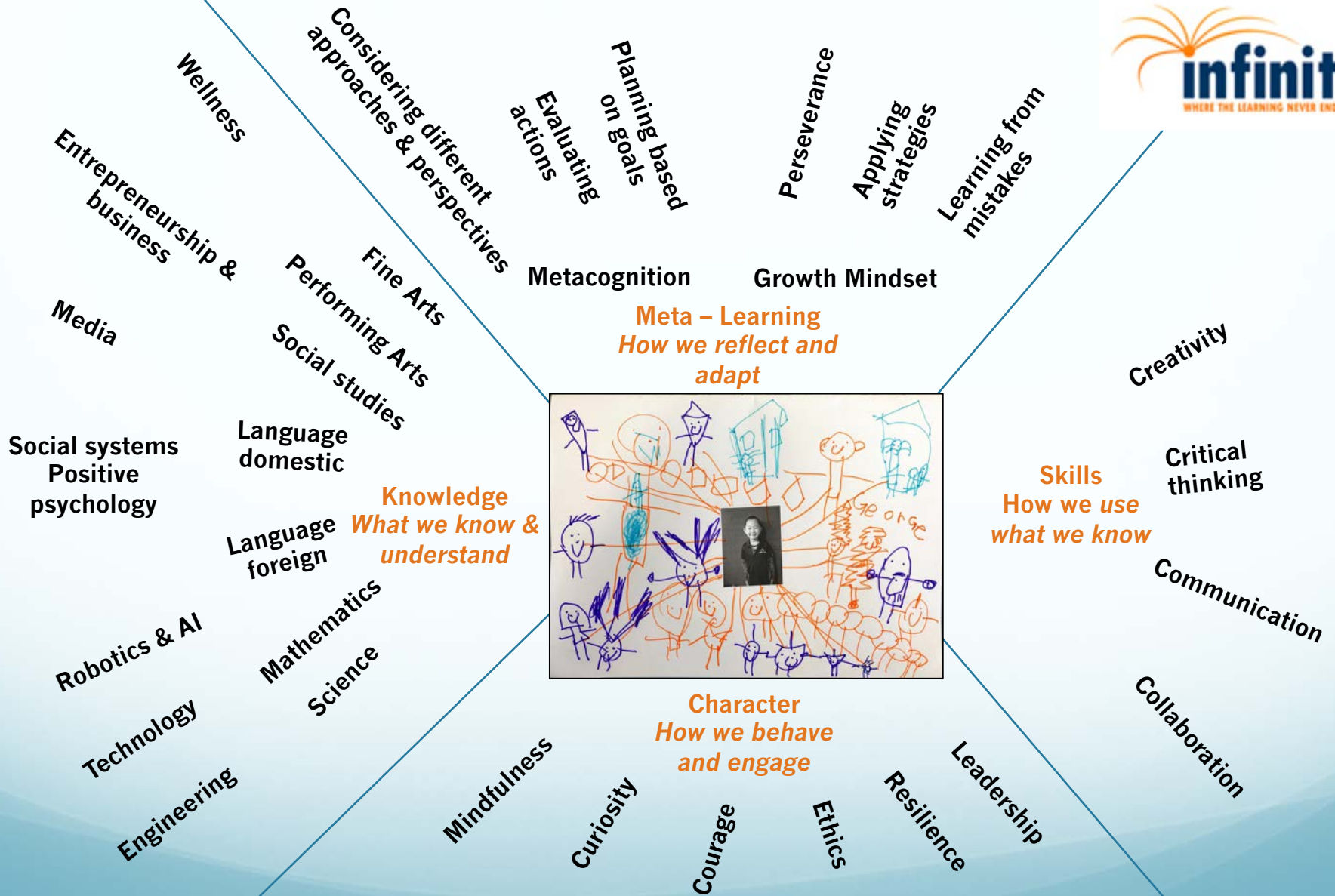
# Your lessons today, last week?

Thinking  
Using lang, sym & txt  
Managing self  
Relating to others  
Participating

English  
The arts  
Health and physical education  
Learning languages  
Mathematics and statistics  
Science  
Social sciences  
Technology  
Critical languages

# Global Learning Trends

Annan & Wootton, 2018, adapted from Fadel, Bialik & Trilling, 2015



# Your **l**essons today, last week?

*Meta-cognition  
Growth Mindset  
Creativity  
Critical thinking  
Communication  
Collaboration  
Mindfulness  
Curiosity  
Courage  
Ethics  
Resilience  
Leadership*

Fine arts  
Performing arts  
English  
Mathematics  
Science  
Wellness  
Entrepreneurship & business  
Media  
Positive psychology  
Robotics  
Artificial intelligence  
Technology  
Engineering



# Te Waka Una

## CORE SKILLS

**Mana Korero**

Fesoʻotaʻiga  
Communication



**Mana Maul**

Faiuaga Loini  
Problem Solving



**Mana Tū**

Feʻamalosi  
Courage



**Mana Whanau**

Galulue Faʻatasi  
Team Work



**Mana Ake**

Taitaʻi Mataala  
Self Management



## Mana Ake Taitai Mataala Self Management

- ✓ Right place, right time, right thing
- ♥ Respecting yourself
- 📶 Managing emotions
- 💡 Believing in yourself
- 🔄 Bouncing back

## Mana Whanau Galulue Faatasi Team Work



- ✓ Understanding expectations
- ♥ Respecting others
- 👍 Being reliable
- 🤝 Supporting & valuing others
- 👥 Learning from others

Mana Whānau

## Mana Tū Fa'amalosī Courage



- 🧠 Using initiative
- ➡ Handling change
- 🔄 Using feedback
- 💡 Sharing ideas
- ❓ Trying new things

Fa'amālosi

## Mana Maui Fa'auuga Lelei Problem Solving



- 🤝 Seeking support
- ❗ Owning mistakes
- 💬 Asking questions
- 📊 Making improvement
- 🏃 Persevering

Fa'auuga

Mana Māui

## Mana Korero Feso'ota'aga Communication



- 🎵 Sharing self interests
- 👂 Listening well
- 🤝 Making connections
- 📶 Interacting positively
- 👥 Understanding others

Mana Kōrero

## CORE SKILLS





# Te Waka Unua

## Term 3 2020 Learning Maps Journey



Term 2 Holidays Analysis	Analysis of our data to focus our next learning maps in one CORE SKILL area. Each team to select one of the 5 CORE SKILL areas of focus on.
Weeks 1-3 Learn more to draw map 2	Activity 7: Learn more to draw Map 2 (p23) The school wide Learning Framework we will be using is our CORE SKILLS. This is the language we want to introduce to our students. <b>Your Team focus is:</b>  Piwakawaka- Mana Ake, Self Management, Ta'ita'i Mataala  Kea- Mana Tū, Courage, Fa'amālosi  Toroa- Mana Ake, Self Management, Ta'ita'i Mataala  Ruru- Mana Māui, Problem Solving, Fa'a'iuga
Weeks 4-5 Draw map 2, Create and record the data set.	Activity 9: Draw your Infinity Learning Map 2 (p27) Alter your 4 prompts; Draw the people that help you..... Activity 10: Create the data set (Digital Photo, Video, Google form)
Weeks 6-8 Monitoring your improvement	Activity 11: Improving your learning area (p30) Activity 12: Monitoring your improvement (p31) <b>Any adult should be able to ask any student what their learning focus is and a student should know and be able to answer.</b>
Weeks 9-10 Reflect on your progress	Activity 13 Reflect on your progress (p35)
Term 3 Holidays Analysis- <b>REPEAT CYCLE</b>	Next steps- "Positive storytelling" (Sample Group selected)

## Group discussion

- **Talk in groups** about your thinking for Term 3 mapping activities
- **Feedback** your initial thinking



# Positive storying

## Activity 16a

- How does this activity fit with the mapping exercises?
- A little background of the positive psychology sitting behind the storying

# Student voice-active learning comment

*I am happy I have achieved my first learning priority, this was to improve my understanding of Area and Blocks in maths. I achieved this by setting up an appointment with my maths teacher. I asked him if there was a good time we could sit down and help me understand Block Area. Our Math teacher has now set up a Math tutorial and I attend these so I can get a better understanding. My next change priority is to listen to teacher instructions so that I know what I need to do to finish my work. I have started taking notes and I ask questions when I don't understand*

# Student voice-active learning comment

*My learning priority from the start of the year was to participate more in class discussions. It was hard at first because I was shy and sometimes I wasn't sure if I had the right answer. I decided I would put my hand up and have a say at least one or two times in a class. This became easier and now I am confident to speak up. My new change priority is to have a better attitude towards class topics. I will keep asking questions until I really understand, I can also ask my friends and I can do my own research on my topic.*

# Positive storying

## Case studies



**Brian and Jean to come to your schools and create some case studies,**

- **Week 3, Monday 3<sup>rd</sup> and Tuesday 4<sup>th</sup> August**
- **Select a group of 2-4 students**
- **Set up time for Brian/Jean to talk with the students and their teachers and parents about their maps, videos and google form data,**
- **Brian and Jean draft case studies and confirm accuracy with the participants,**
- **Finalise case studies for use as examples later in the year.**



# **Regional forum**

## **Term 3 & 4**



**Term 3 - Weaving together the mapping exercises with the positive storying and integrating those activities into daily routines.**

**Term 4 – Sharing positive stories from 2020 learning maps project**

# Anxiety in learning



**Positive psychology focus on dealing with anxiety - in relation to learning and traumatic events (such as the COVID experience for some families - e.g. job losses)**



# Calming an anxious brain

# Anxiety and stress



Children currently report more anxiety, maybe because:

- We are more aware of anxiety
- It is OK to talk about feelings like anxiety
- Easily built into stories
- Children have fewer opportunities for natural mindfulness moments
- Connectedness is ubiquitous – no release
- Less optimistic about the future

Adults are programmed to be attuned to children's emotions

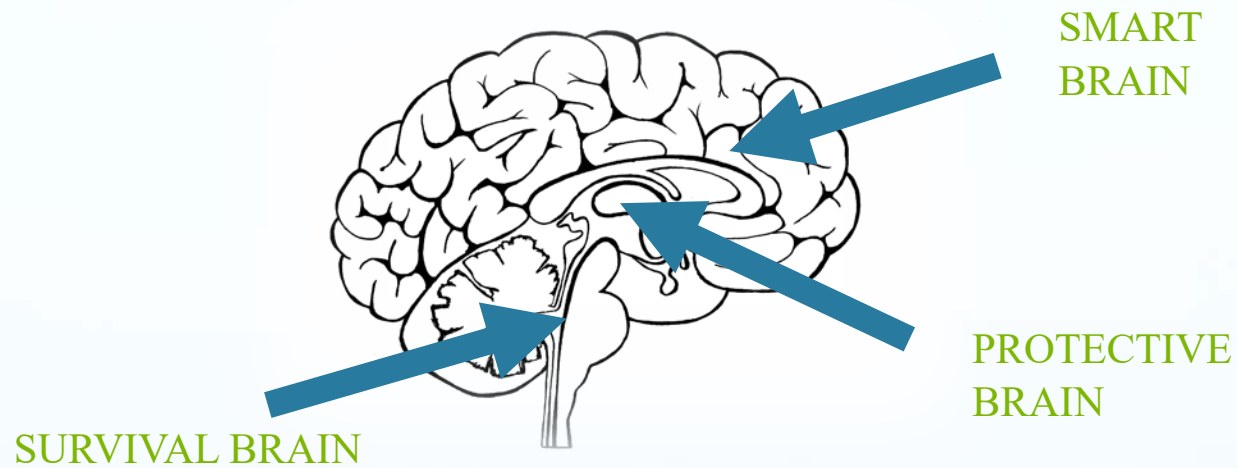
Stress is reciprocal



# What changes may we notice?

1. Concentration	Difficulty concentrating, distraction
2. Performance	Challenged by academic tasks
3. Participation	Sense of hopelessness, disengagement, reticence around new activities
4. Sleep	Sleep problems/tiredness, irritability, listlessness or nightmares
5. Actions	Changes in behaviour, hair-trigger response, angry outbursts
6. Relationships and Play	New preferences for play, reversion to younger behaviours, clinging, lowered tolerance, increased sensitivity or withdrawal
7. Somatic indicators	Somatic problems, muscle tension, sore stomach, headache

# The Triune Brain



# Circuiting on the fast and slow tracks

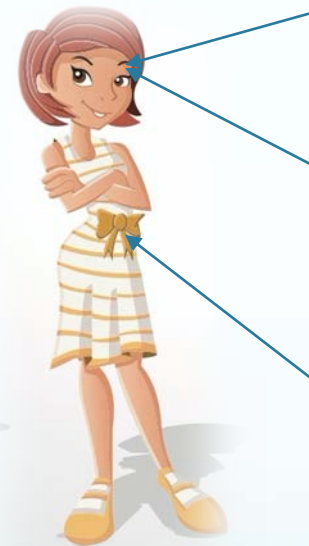
- **SLOW ROUTE:** Circuiting from mid-brain to survival brain and smart brain – whole brain response.
- **FAST ROUTE:** All resources circuit between the mid-brain and the survival brain – away from the smart brain.



# regulation of the sympathetic nervous system

## Fight, flight or freeze response

- Neurotransmitters (e.g. adrenaline and cortisol)
- Increased heartrate
- Pounding heart/tight chest/feeling of suffocation
- Slowed digestion - distress
- Dilation of pupils
- Priming of muscle groups to respond, blood flow to muscles in arms
- Numbness
- Fainting
- Nausea
- Hot or cold
- Sense of time



1. Amygdala fires – message to the hypothalamus

2. Hypothalamus orders release of adrenaline

3. Travels to the adrenal cortex from pituitary gland that releases cortisol.

# Challenging anxiety – general principles

1. Shift the focus away from the cause toward maintaining factors
2. Understand the context
3. Immediate focus: Bring children back to the moment – whatever it takes.
4. Long-term: Need increased experience of the challenging event.
  - **Just enough** disequilibrium to form new neural connections
  - Experience is better than hours of talking.
5. Reduce avoidance activity that strengthens unhelpful neural connections/increase approach behavior in other areas.
  - Attempts to directly reduce anxiety may be counterproductive
  - We grow in the direction in which we focus
6. Accepting the experience required is usually the hard part.
7. Things may become more challenging before getting better.





# What can we do in the classroom?

1. Teach children how to understand and manage anxiety – active role
2. Focus on breathing, language of amygdala, control of the primitive brain
3. Mindfulness – create space between you and anxiety – awareness of the moment – attend to what *is* – kindness to oneself – from head to whole body focus
4. Exercise (e.g. regular physical activity, pacing during panic attack)
5. Muscle relaxation, release of tension
6. Experience, not trying to avoid the challenge completely
7. Change relationships with the response



# Narrative questions around anxiety: Some examples

After assuring of safety and alliance (e.g. worry)

- Tell me the story of the worry.
- What do you call the worry?
- How strong is the worry? (1-10, big and small etc)
- What would worry look like if you drew it?
- What would be better than the worry?
- What makes the worry shrink?
- What makes [what is better than worry] grow?
- Has worry been around this week?



# 8 WAYS A CHILD'S ANXIETY SHOWS UP AS SOMETHING ELSE

## 1. Anger

The perception of danger, stress or opposition is enough to trigger the fight or flight response leaving your child angry and without a way to communicate why.



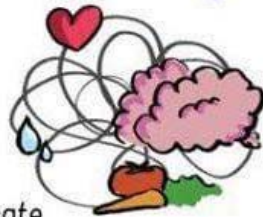
## 2. Difficulty Sleeping

In children, having difficulty falling asleep or staying asleep is one of the hallmark characteristics of anxiety.



## 3. Defiance

Unable to communicate what is really going on, it is easy to interpret the child's defiance as a lack of discipline instead of an attempt to control a situation where they feel anxious and helpless.



Chandeliering is when a seemingly calm person suddenly flies off the handle for no reason. They have pushed hurt and anxiety so deep for so long that a seemingly innocent comment or event suddenly sends them straight through the chandelier.

## 4. Chandeliering



## 5. Lack of Focus

Children with anxiety are often so caught up in their own thoughts that they do not pay attention to what is going on around them.

# FOCUS

## 6. Avoidance

Children who are trying to avoid a particular person, place or task often end up experiencing more of whatever it is they are avoiding.



## 7. Negativity

People with anxiety tend to experience negative thoughts at a much greater intensity than positive ones.

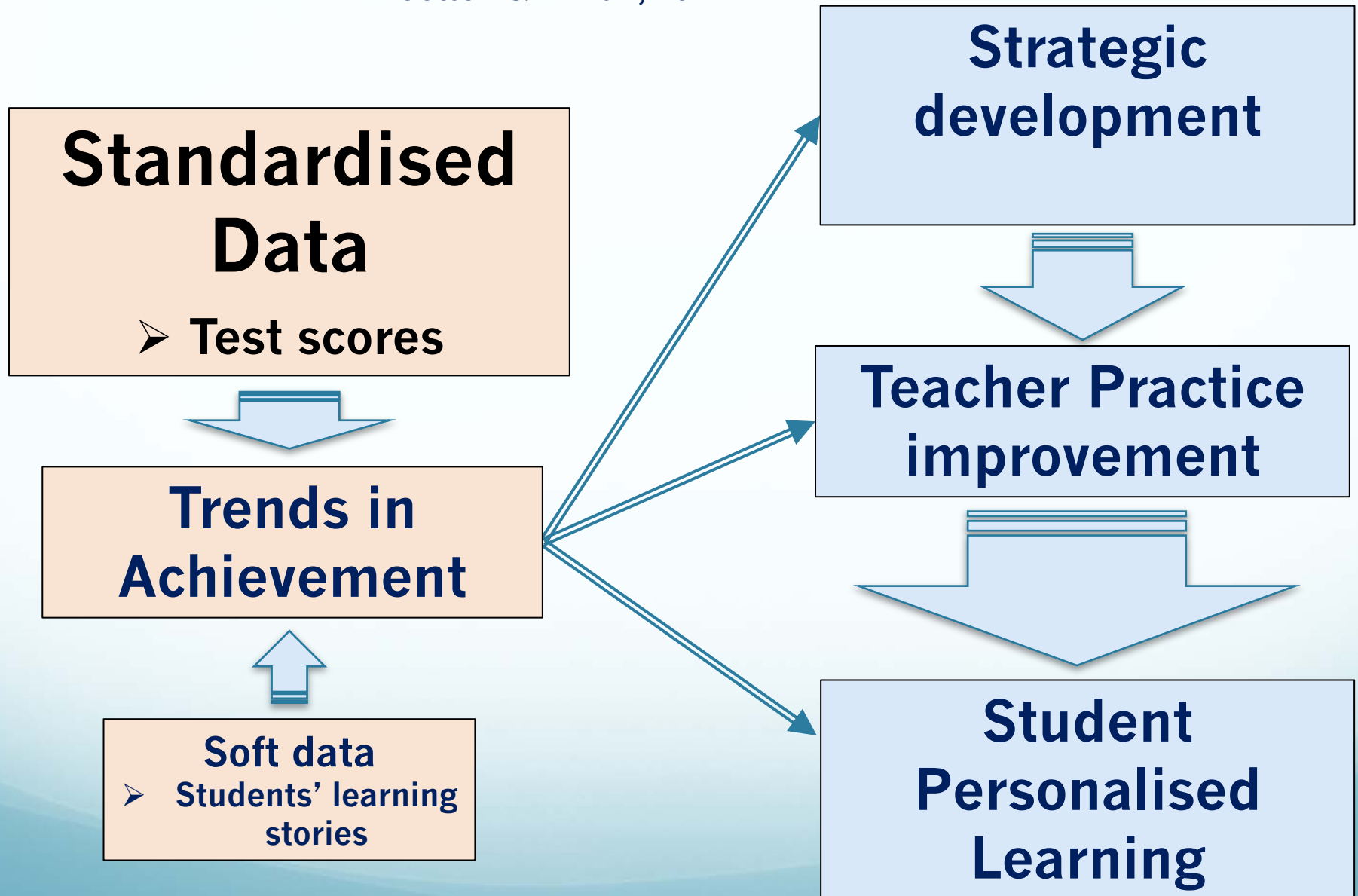
## 8. Overplanning

Overplanning and defiance go hand in hand in their root cause. Where anxiety can cause some children to try to take back control through defiant behavior, it can cause others to overplan for situations where planning is minimal or unnecessary.



# Content Learning Design

Wootton & Annan, 2017



# Learning-how-to-Learn Design

Annan & Wootton, 2017

