

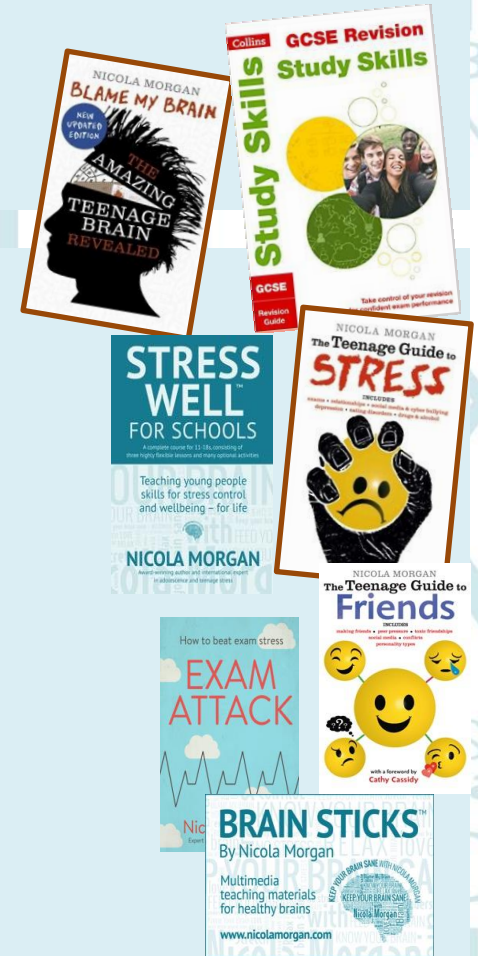
Teenage Brains in Your Classroom with Nicola Morgan

Information, classroom materials
and free resources:
www.nicolamorgan.com



More information

- Your handouts
 - My website
 - www.nicolamorgan.com
 - Today's blog – handouts with hyperlinks
 - Lots of free things
 - Teaching resources
-
- Free Brain Sane newsletter: wellbeing, brains, adolescence, stress, science of reading and learning, digital/online effects



To consider today

- A. What's so special about teenagers?
- B. How this affects learning
- C. Strategies for schools



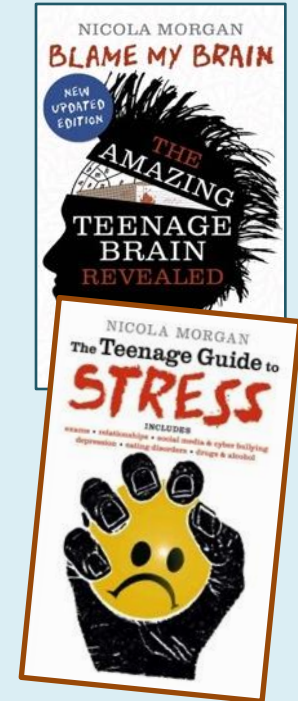
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What makes adolescence special?

- A. State of Brain – internal pressures
- B. Stage of Life – external pressures

Yes, they are all individuals...

But this is *not* a modern problem

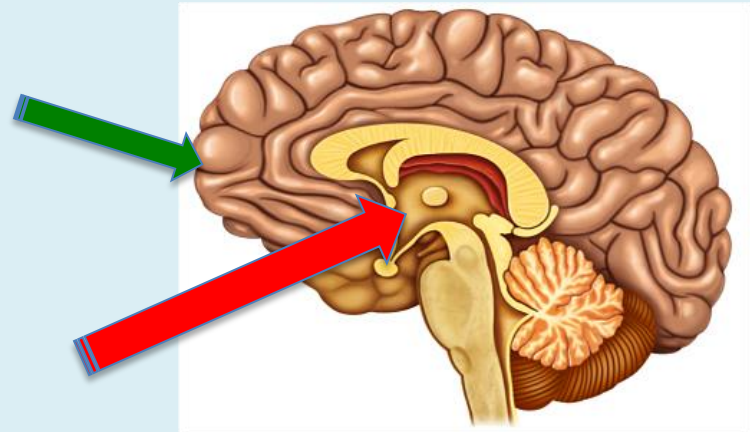


Brain differences in brief

1. Major changes in connections from age 11
2. Prefrontal cortex (control) develops last (mid-20s)

Limbic system, with amygdala – emotion/impulse/reward

PFC



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→ Consequences

Strong amygdala v weak prefrontal cortex:

- Emotions (volatility/control)
- Empathy
- Impulse control
- Peer pressure behaviour
- And risk-taking



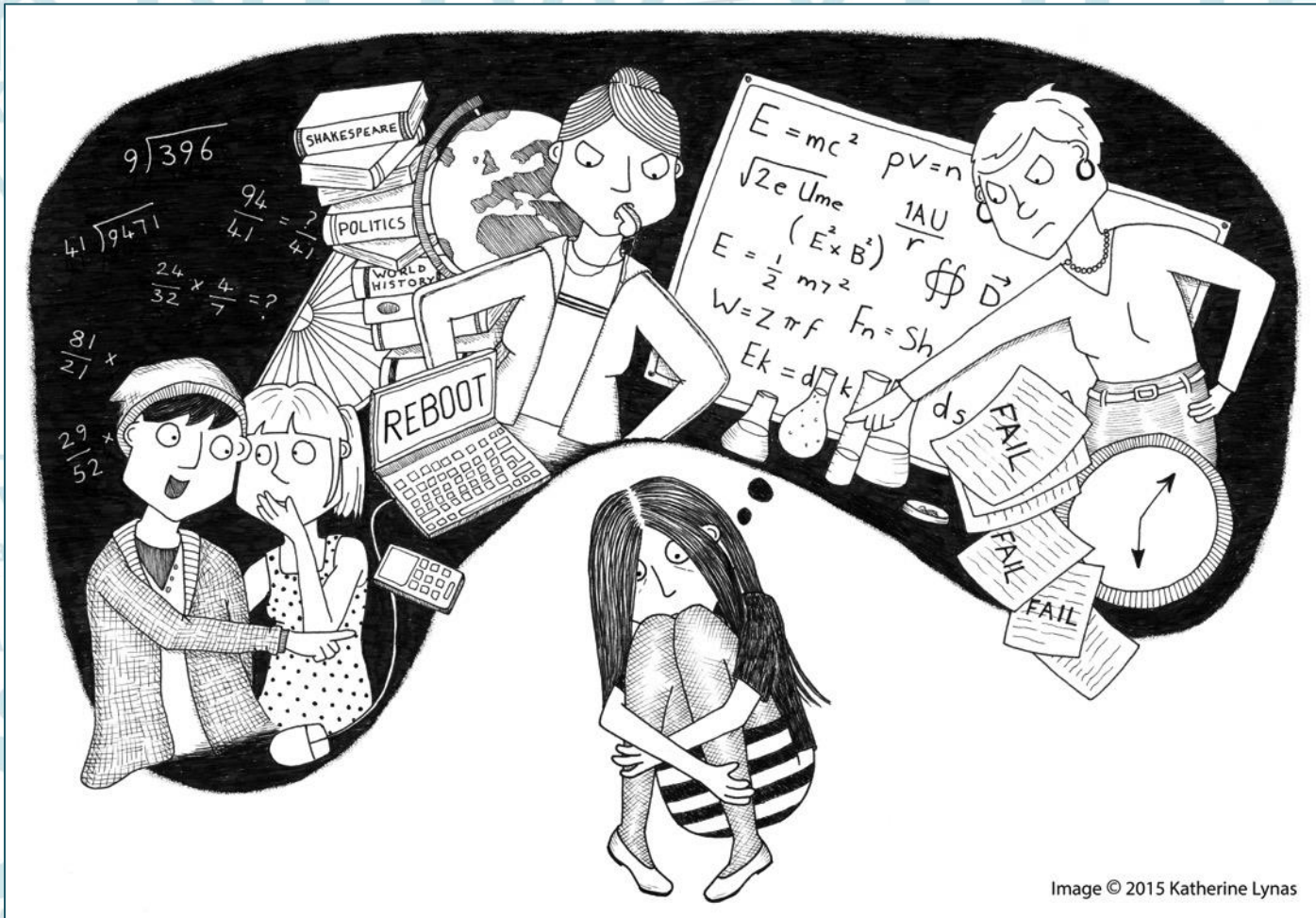
See Blame My Brain and your handout for references

And...

- Sleep changes → jetlag



External stresses – “stage of life”



First, what is stress?

- Biological response to threat
 - Adrenalin + cortisol
 - Designed to maximise performance
- So, what's the problem?
 1. Too much reaction → panic
 2. Cortisol builds up → many negative effects
 3. “Preoccupation”

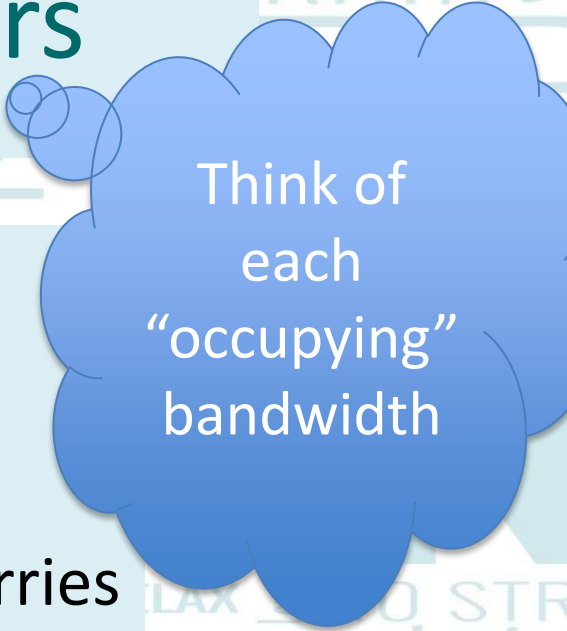
“Preoccupation”

- “Bandwidth”: if part attention occupied, can’t perform 100% on task
 - Everything occupies *some* bandwidth
 - NB Intrusive thoughts; worries; self-consciousness
 - Online activity – many rapid tasks at same time
 - Need supreme **control** to stay on task
- So, any preoccupation lowers performance:
 1. Cognitive capacity (learning)
 2. Executive control (behaviour)

Daniel Levitin’s *The Organized Mind* covers this

Different teenage stressors

- Perfect storm of change
- A regular schoolday:
 - Constant pressure to focus/perform
 - Friend/peer issues – comments/worries
 - Self-consciousness – stronger in teens
 - Extra stresses for introverts

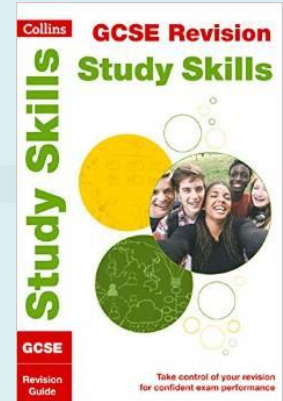


Think of
each
“occupying”
bandwidth

And “new” stresses


1. Exams

- Higher pressure, frequency + stakes
- Constant pressure over long period
 - cortisol build-up



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2. The Internet + Social Media

- Knowledge – for better and...
 - Information overload
 - Repetition of bad news →  emotional effect
 - “bad maths” → more anxiety → “Generation Katniss”

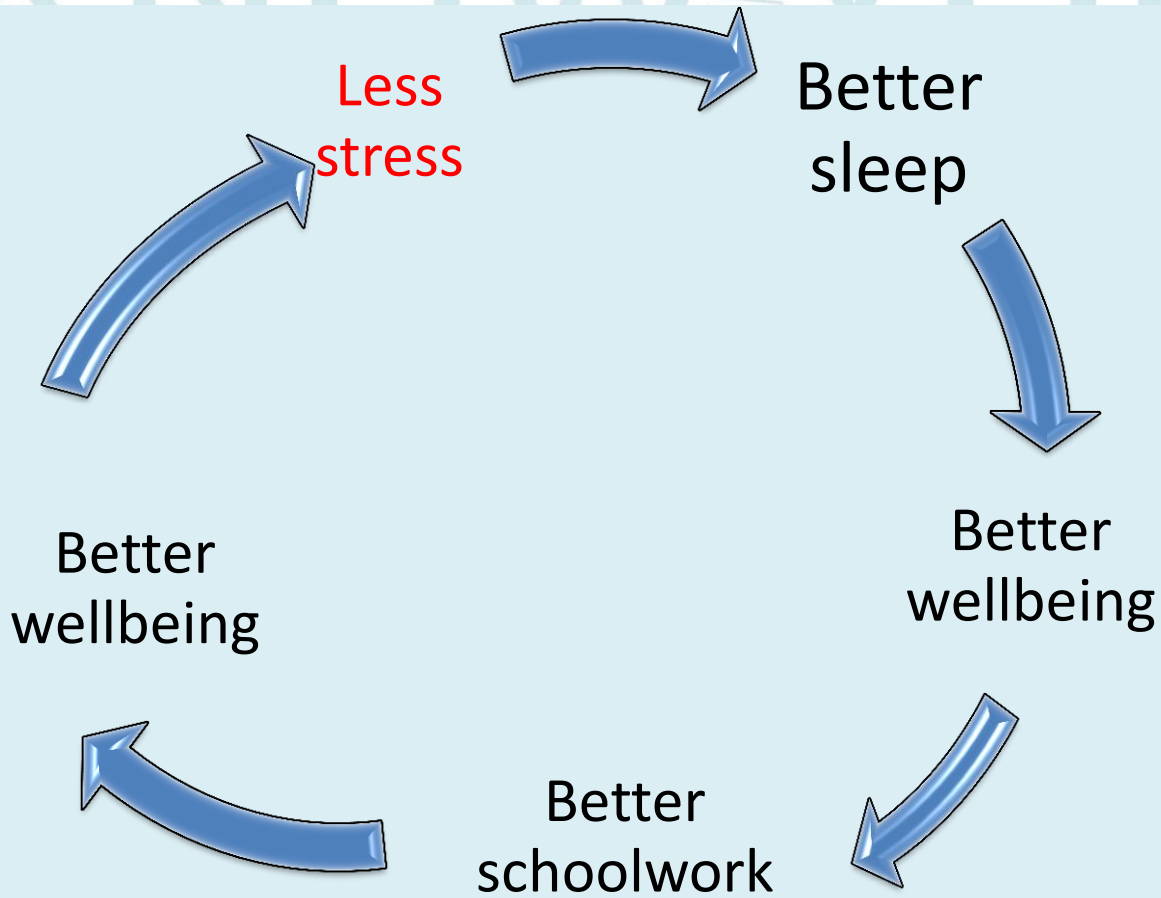
...and Social Media

- Social networking very important, but...
 - More connections than “Dunbar’s Number”
 - Competition; unrealistic goal of perfection
 - Self-consciousness and lack of privacy
 - “Online disinhibition effect” → cyber-bullying
 - Constant attempts to multi-task

Two over-riding consequences

- Digital overload – ‘continual partial attention’ and exhaustion
- Theft of time – perchance to dream

Relaxation → wellbeing → performance



2. *Empower* daily relaxation

Discuss and enable activities to lower cortisol

1. Personal choice – autonomy
2. Varied – body/physical and brain/mental
3. Deliberate – extra effect and self-control
4. Switch off screens/devices - together

3. Enable better sleep



Image © 2015 Katherine Lynas

Educate re “sleep hygiene”

- See my website for free advice
- Sleep hygiene has two core aims:
 1. Calm body and mind in the **hour before bed**
 2. Trick brain into producing melatonin earlier
- Top tip: switch off devices (adults, too!)

4. Value and cater for introverts

1. *Understand* the differences
 - Need peace – to be alone sometimes
 - Prefer to work alone
2. Openly discuss and value *both* types
3. Adapt teaching practices
4. Give introvert students strategies

“Quiet Power” by Susan Cain – and her website

5. Promote reading for pleasure



Image ©Katherine Lynas

Science behind R4P

Reading Agency Literature Review 2015 – huge meta-study (see my website)

- Self-esteem; greater life satisfaction
- Increased vocab and knowledge
- Increased empathy + self-understanding
- Better mood + relationships
- Better results
- Reduced stress → better wellbeing

Readaxation

Definition: “Reading to relax, as a conscious strategy for wellbeing and stress management. The aim is to feel and function well.”



Why does reading de-stress?

- No one can talk to you – switch off demands and noise
- Escape into different world, of your *choice*
- Allows “engagement” / “flow”
- Chance to forget worries

Readaxation section of my website has references

Readaxation → wellbeing → performance

Readaxation

Less stress

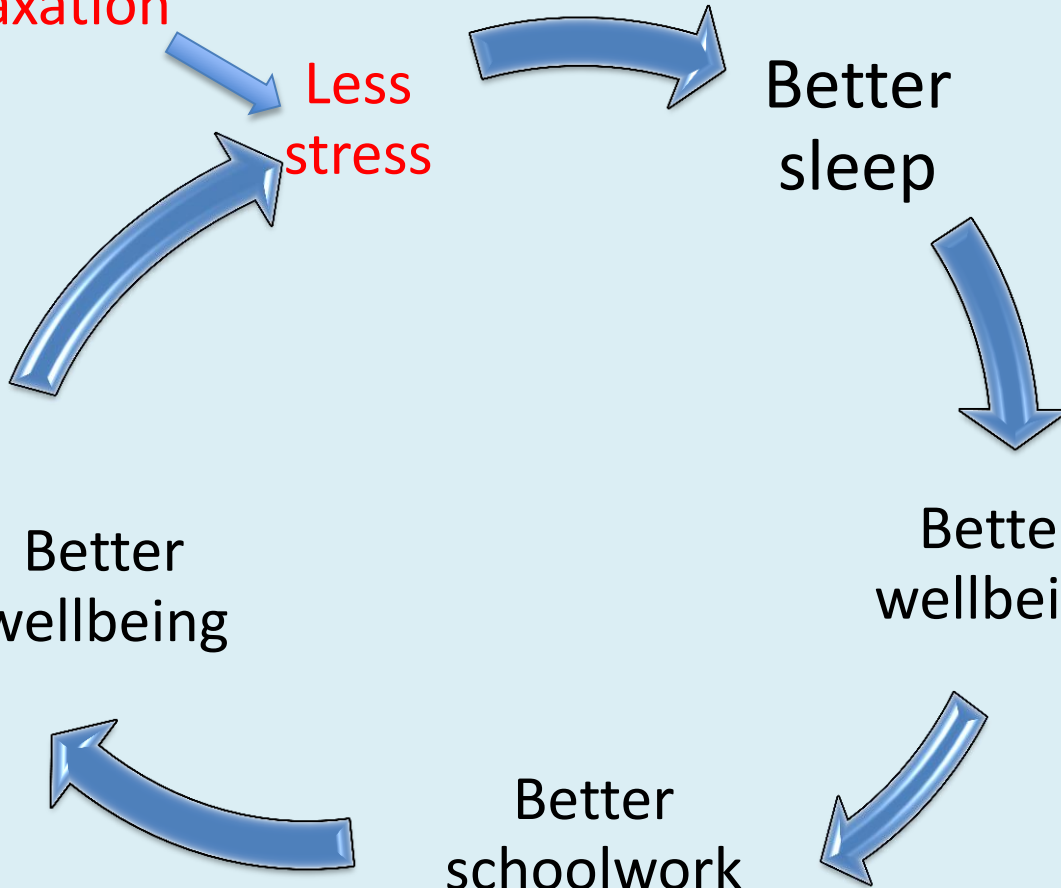
Better sleep

Better wellbeing

Better schoolwork

Better wellbeing

PLUS all the other fantastic benefits of reading





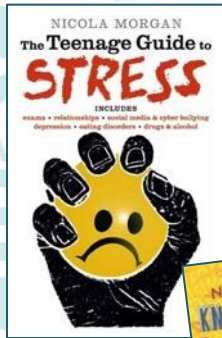
Danger

Live wires

CAUTION:

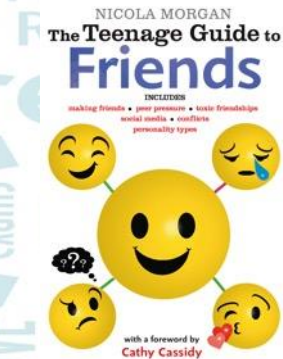
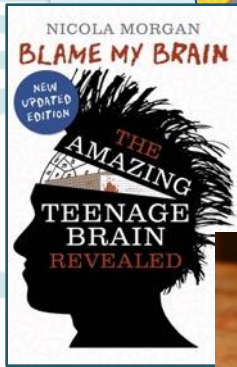
Children who read a lot
risk becoming
independent,
open-minded,
knowledgeable,
questioning and
CONFIDENT

Readaxation and the power of reading for pleasure - www.nicolamorgan.com



Teaching young people skills for stress control and wellbeing – for life

NICOLA MORGAN
Award-winning author and international expert in adolescence and teenage stress



Teenage Brains in Your Classroom with Nicola Morgan

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