

Why should you be frightened of exams or the like?

Here the quick guide how to avoid it

N°1



Stress-hormones are neuro-blockers.

They block your brain !

The only way to get rid of them:
physical exercise!

do sit-ups, run, dig the garden,
clean the floor, dance... and
feel your blood rinsing your veins.

Then generate neuro-transmitters.

They make your brain brighter!

Good stimuli around you will do that:

sweet on your tongue, fresh fruit/vegy to chew,
nice fragrance around, gentle music in the background,
a comfortable seat to lean back, colours you love on your desk/carpet/window.

Be generous with smiles and hugs and encourage yourself and everyone with friendly compliments.

For each study topic or book that you read,
immediately **mind-map one poster.**

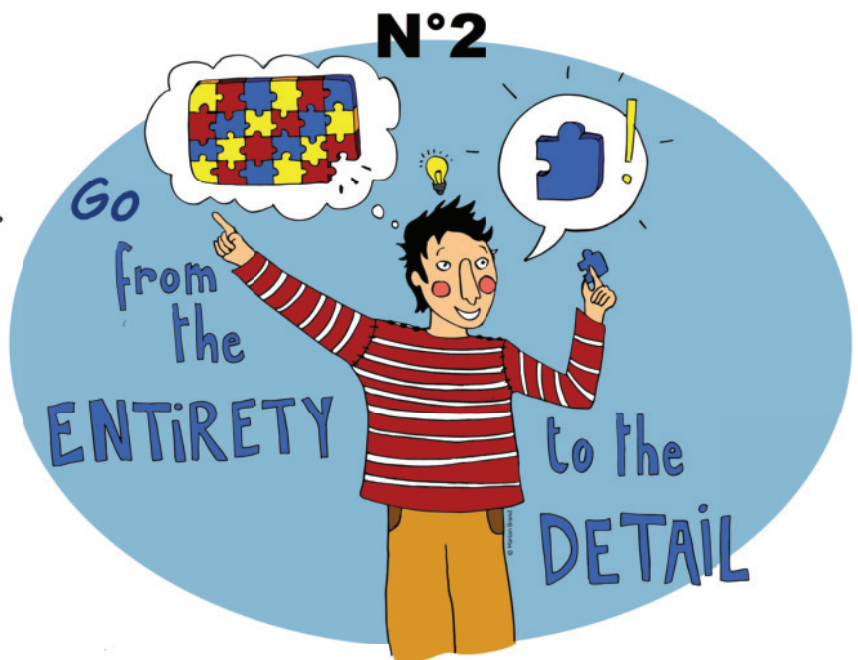
This sustains the memory: each detail will
automatically call up all the others.

Using images

automates understanding:

draw or google images/symbols
and pin them on your poster.

*no black-outs
anymore!*



N°2

N° 1 speeds up learning.

N° 2 makes it sustainable.

N° 3: finally look at your mind-map and
call up what you learned this day.

Your brain will then grow entire
'highways' for this knowledge

while you are laying asleep.

Like heart and lung don't stop their job
during your sleep, the brain doesn't stop learning.
It repeats eagerly all night what you did right before.

N°3

REPEAT
BEFORE





Erasmus+ Strategic Partnership

**Alphabet
vivant et vécu:**
Ainsi marche le cerveau.

**Un bon début
pour une bonne fin!**

**Loved living
Alphabet:**
That's how the brain works.

**Beginning good
all good!**

**Geliebt gelebtes
Alphabet:**
so lernt das Gehirn.

**Anfang gut
alles gut!**

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Worksheets for brain-friendly education

Effective Learning + Stress Management

Is there a reason to be frightened of challenges?

Oh yes, if these brain functions 1, 2 and 3 are not respected, cells under the skull will grow the wrong way and your fighting against mistakes can become indefinite.

Understanding these functions makes all the difference and going with instead of against the brain, makes things a lot easier.

"We cannot afford any longer to use our brain as if we know nothing about its functions!" says Harvard and Oregon Professor Manfred Spitzer, founder of the Transfer Center for Neurology and Learning Ulm.

If you are the person who wants to know more than the poster can tell, here you get it.

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Stress hormones have been a genius invention: they multiply the strength of your muscles and switch off your brain! - What is that good for?

Well, when facing tigers and bears at stone-age, taking the time for reasoning was no option. Reflexes had to be effective at the very instant. Once the reason is switched off, nothing will disturb the reflexes and the multiplied muscle power will make them effective.

We still have the same brain, but effective punching won't solve the challenges we are facing now. Challenges now ask for our reason. We need a plugged-in brain. So, we first have to clear out the stress hormones that plugged it out.



How to clear out stress-hormones?

Stress sheds stress-hormones directly into our muscles. Sometimes you can feel it burning in your limbs when it happens.

Using them is the only way to get them out there again.

Meditating won't help : if your muscles don't use up the stress-hormones, these hormones start poisoning your body.

And if this stress does not just happen once-in-a-while, but is an ongoing situation, and you don't keep clearing it out, this poison even kills brain cells. In particular the hippo campus (the 'receptionist' of your brain) then **atrophies** significantly!

In brief: you absolutely have to get the stress hormones out.

Your body knows this very well. That's why the jaw muscles start playing, or our fingers start cramping round the armchair: they try to use up the stress-hormones. But there are a lot of really effective stretching exercises you can do sitting or standing where ever you are (e.g. pilates).

Reward hormones are the intelligence turbo: they are the neuro-transmitters that switch your brain to high performance (and they are the ones that boost your immune system too, imagine!)

Generating a maximum of them is actually easy:

- surround your-self with pleasurable stimuli like natural fragrance, fresh healthy snacks, nice colors and sounds.

- be generous with smiles, hugs, encouragements, compliments and appreciations.

- excel! There is no greater kick. Make sure each day (weekends included) you excel yourself in some way. This can be 1 push-up more than you were able to do yesterday in one go, or to stretch your bend back 1 inch further, or 1 new vocabulary you learn and use, or a new device you learn to handle etc.

In brief: make you and your surrounding reverberating with inherent yeses: yes I can! Yes you can! Yes we can!

And what about the nasty days, when all is going wrong?

Well, pull the corners of your mouth to your ears: smile! As awkward as this might feel when you feel bad, keep smiling! Studies proved, that, even if you are in the worst mood, pulling your mouth to smile for over a minute generates reward hormones immediately! Magic? Natural? Well, try out yourself. It can be an eye-opener and – like any reward hormone – a 'thought opener' too. Remember Shakespeare "For there is nothing either good or bad, but thinking makes it so" (Hamlet, Act 2, Scene 2).

Getting rid of stress & creating reward in one!

A friend of mine had 7 brothers and sisters who worked for their living at the production-line. But she went to University, studied abroad and speaks several languages.

What did she do, that her siblings didn't?

The mere noise of a school day fills the body with stress-hormones, leave alone frustrating experiences from teachers or class mates. The first thing each day when coming home: she kicked herself out of that "after-school lethargy" by eating an entire bar of chocolate at once. It was a pleasure that created a first dose of reward hormones. Kicked off by this dose, she went to her room, locked the door to make sure nobody would watch her, switched on the music to high volume and then was dancing away like mad for about 30 minutes. There couldn't have been a more excessive way of rinsing the muscles form stress hormones & generating heaps of reward hormones at the same time!

There are so many things that provide both together. Grab such opportunities and see what happens. Dancing clears stress hormones out of the muscles while the musical rhythm is flooding you with reward hormones.

The same applies to cleaning: in addition to being physically active, the reward generating result is immediately in front of your eyes.

The same for gardening: in addition to using your muscles you get fresh air and enjoy fresh healthy things on your dinner table etc.

Note: your 1st key to success is "Move to get stress out! Enjoy to get reward in!"



What about **Eu-stress**?

Above have been described **distress** functions: **fear** is involved! We feel forced and unable to respond. **Eu-stress** is the opposite: **joy** is involved! We boost self-efficacy feeling the vigor to excel. Eu-stress is a rewarding experience that biochemically boosts both, body and mind.

How to make sure you will experience **Eu-stress** and not **distress** around a specific topic?

It's simple: each time you start on a new topic, make sure the 2 following components are in place.

N°1: **Feel fantastic**

If you boost good feelings by physical exercise and good stimuli and smile, the new 'file' for the new topic automatically will be stored **central** on the 'hard drive' of your brain (the cortex). Central storage automates emission of neuro-transmitters. Whenever you come back to this topic, reward hormones are flooding your brain and make it work better and better. You instantly feel self-efficacy and the vigor to excel.

But if you **feel bad** while learning about a new topic, all get's stored **lateral** in the temples. There it automates the emission of neuroal blockers. Whenever you come back to it, your brain will be flooded with stress hormones. You automatically feel fear and not being able and your brain functions become worse and worse.

Note: **the beginning is decisive!** Once a 'file' has been created lateral you can't quickly put it central by copy and paste. It's made of living cells. They keep growing where they started!

N°2: **Overview before detail !**

The so-called Mexican Hat Effect shows the following 2 functions within the cortex (the 'hard-drive' of our brain):

- items stored in different locations will **block each other and therefore lead to black-outs.**
- items stored in the same location will **activate each other and therefore automate memory sustainably.**

The question is: how to guarantee tidy storage under the skull that bans black-outs?

What the brain sees at a glance as a **unified whole**, is created in one location in exactly the same order in the cerebral cortex as a miniature map of neuronal cells.

Anything that is spread over **several pages** is at a risk to end up in different locations within the cerebral cortex.

In other words: mind-map **while reading books!** Glancing over the map keeps everything together in one location in your brain, exactly as laid out on the map.

If you don't map it out, you are programming black-outs because the pages risk to be scattered over the brain and block each other.

N°3: **Repeat before sleeping !**

Studies showed via electroencephalogram that the brain repeats during the night the exact patterns of the electrical impulses that have been activated before sleeping. Repeating impulses is the learning process: it makes the used connections grow. So the connections of what you did before sleeping keep growing while you are sleeping.

Bigger connections transport more electric power and make the knowledge more accessible. Therefore, what you reviewed before sleeping, you will know by breakfast already much better than in the evening. There is a saying that recommends to put the book under the pillow. However, it's not the place under the pillow but the glance into the book before, that makes the difference



Summary

Looking at the day schedule of a well organized household you might discover potential for improvement.

Instead of swotting right after school with a brain blocked by stress-hormones, start with fun, run, bike, enjoy... Once this has put the bio-chemistry in your body to high performance, learning will work much faster. You gain time. And faster learning is also more pleasurable. The pleasure stores it central. This makes it self perpetuating.

Instead of finishing the day at TV and getting up the ex morning with big neuronal wires for random coincidences, you can easily determine what you want your brain to use its night shift for. Be the Head of the House and make things go your way!

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