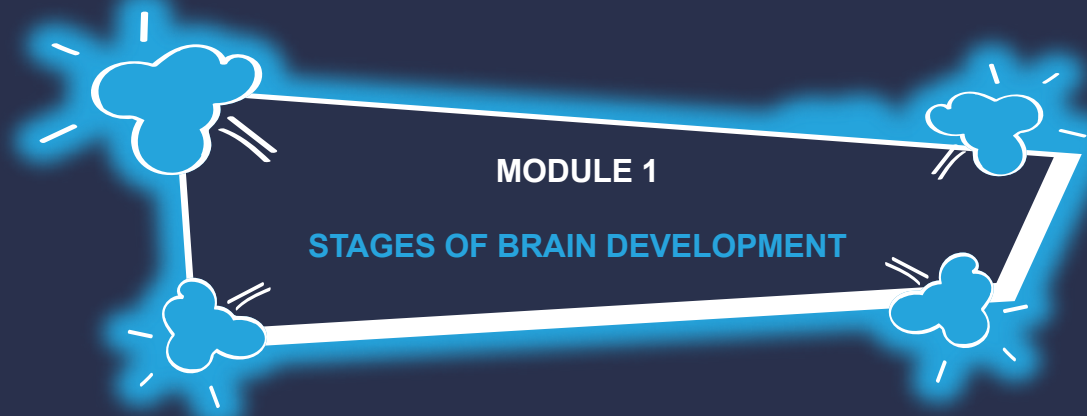
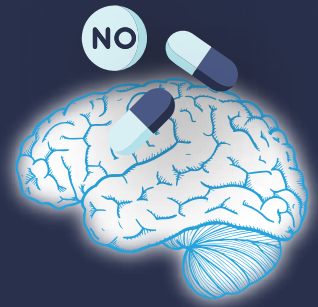


SAVE YOUR BRAIN
SAVE YOUR BRAIN
SAVE YOUR BRAIN



YEARS 7-8 BAND, HEALTH & PHYSICAL EDUCATION
FOCUS AREA: ALCOHOL AND OTHER DRUGS

Learning task: Stages of Brain Development - 45 Minutes

TOPICS	SUGGESTED SESSION TIME ALLOCATIONS
1. The Architecture of the Brain	15 minutes
2. The 5 Stages of Brain Development	15 minutes
3. Teen Brain Development	10 minutes
Close - Portfolio/homework allocated	5 minutes

Note on flexibility - teachers may prefer to allocate 2 x 45 minute sessions to this module, to allow students more time to respond online, or to play the videos more than once and/or to use stop-start options during videos.

INTRODUCTORY NOTES:

It is important for teachers/facilitators to understand that social and emotional learning fosters the ability to make positive choices about how we behave. As teens, students need to build up the 'tool kit' of life skills to strengthen their decision-making skills.



These include:

- self-awareness
- self-concept
- social awareness
- social management
- critical thinking
- problem solving
- reflecting & analysing

These can be incorporated through this segment via online group discussion. Additionally, when face to face group opportunities present themselves use may be made in pedagogy such as role-play, debating, presentations at assemblies, and local community groups. Teachers will also know that our experiences and actions affect the way our brains develop and positive role models and interactions from family members and other a such as club leaders, coaches, teachers, friends and social group.

Quality feedback, reactions and experiential learning add to the teen's 'tool kit' by helping them to learn:

- Strategies for relating and interacting with others
- Assertive behaviour skill
- How to establish and manage changing relationships – offline and online
- General health and wellbeing activities
- What impact Social / emotional health has on general well being
- Observe real resilience skills in action that support resilient behaviour
- See how others demonstrate coping skills and help seeking strategies



1. THE ARCHITECTURE OF THE BRAIN: 15 minutes

Online Classroom Task: Choose ONE of the videos below and ask students to verbally describe one or two aspects of the brain that interested them.

Video 1 - What are the Parts of the Brain? [CLICK!](#)

Brief video on brain structure: 'Let's dive into neuroanatomy. It sounds like something a smart person should know about, like YOU. We'll go over all of the major parts of the brain, including the occipital, temporal, parietal, and frontal lobes. And we'll even cover some of the other structures that get taken for granted'.

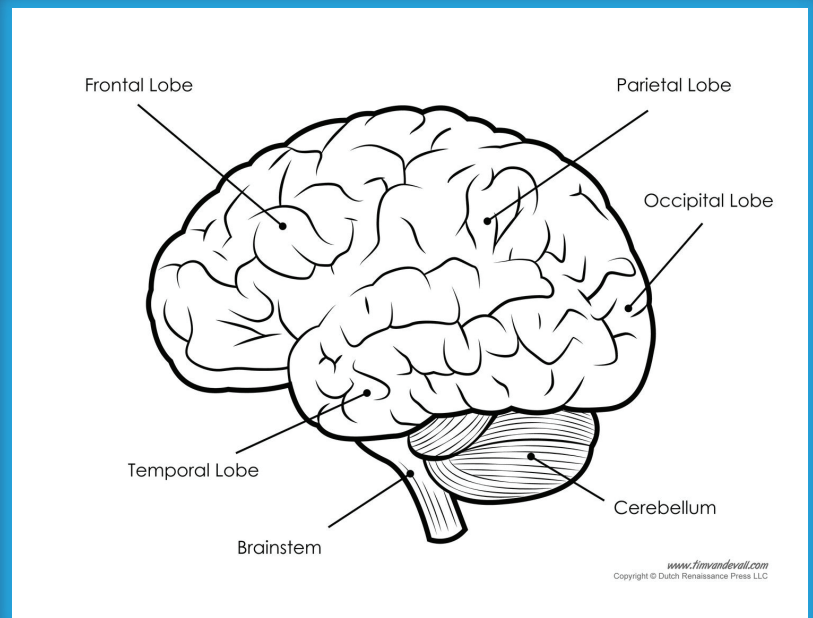


Video 2 - Human Brain: Major Structures and their Functions [CLICK!](#)

Educational video for children to learn what the brain is, which are its parts and how it works. The brain is in charge of coordinating all vital functions of our body and gives meaning to what is happening around us. It receives signals from our environment and sends messages to different parts of our body so that they would respond adequately. The brain is divided into three parts: the cerebellum, the encephalic trunk and the cerebral cortex. In this video we're going to look at each part's function with specific examples. The video also explains the division of the brain into two hemispheres: the right hemisphere which is the location of intuition or creativity and the left hemisphere, which controls tasks like calculating, reasoning or language.

This diagram of the structure of the brain, may help prompt students with terminology used.

CLICK!



Portfolio/homework: Written response: Students to research 5 parts of the brain and describe their function – approximately 150-200 words.

2. THE 5 STAGES OF BRAIN DEVELOPMENT: 15 minutes

Source:  [CLICK!](#)

Main points - Throughout the lifetime of the human brain it continues to undergo changes.

Stage 1: Antenatal 0-10 months

Baby's neurons and connections growing. **Pregnant women should avoid cigarettes, alcohol, drugs.**

Stage 2: Birth - 6 years

Development of voluntary movement, frontal lobes active in development of emotions, attachments. A sense of self is developing. By age six, the brain is 95% its adult weight and peak of energy consumption.

Stage 3: 7 - 22 years

The neural connections or 'grey' matter is still pruning, wiring of brain still in progress, the fatty tissues surrounding neurons increase and assist with speeding up electrical impulses and stabilize connections. **The prefrontal cortex is the last to mature and it involves the control of impulses and decision-making. Therefore, teenagers need to avoid drugs, alcohol and smoking.**

Stage 4: 23 - 65 years

Finally, the brain reaches its peak power around age 22 and lasts for 5 more years. Best approach is to stay mentally active, learn new things, stay physically active and eat a very healthy diet. **Avoid toxins, cigarettes, alcohol and mind-altering drugs.**

Stage 5: Older than 65 years

Brain cells are lost in the critical areas responsible for processing memories. Eat a healthy diet with foods to nourish one's level of dopamine.

Online Classroom Task:

Ask students to work in pairs to share one main finding related to alcohol and drug use and the impact of the brain in the information in this link. Examples are in blue above.



Complete a worksheet with questions related to 5 stages of brain development. (Example of worksheet can be supplied, based on the above notes.)

3. TEEN BRAIN DEVELOPMENT: 10 minutes in session; 15 minutes out of session

Particularly focusing on teen social/emotional development.

Online Classroom Task: Students to watch and discuss at least one of the videos (links below), focusing on the knowledge that 'We are the programmers of our brains' and the fact that our experiences and actions affect the way our brains develop; and that the choice to use drugs can affect emotions and behaviour into adulthood. Feel free to pause the videos at key points for discussion and/or reflection.

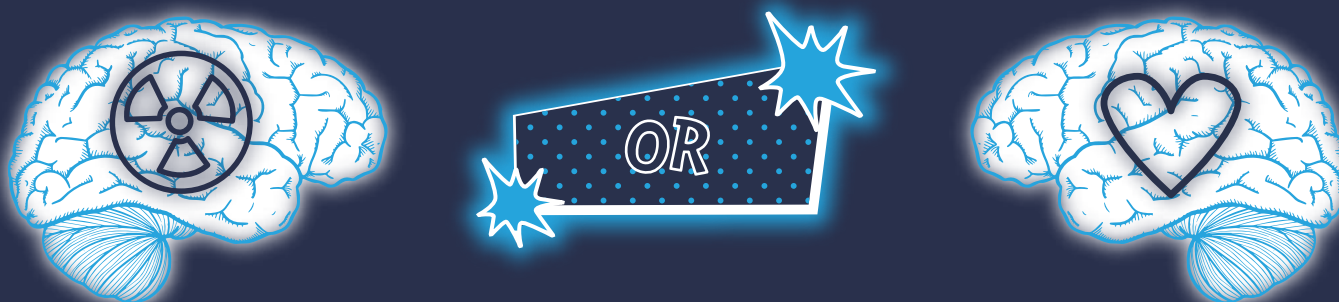
Teen Brain Development [CLICK!](#)

The Teen Brain: Why Teens Have Heightened Emotions [CLICK!](#)

Why The Teenage Brain Has An Evolutionary Advantage [CLICK!](#)

Portfolio/home study: 'We are programmers of our own brains'

Students review one of the videos at home and begin an E Portfolio entitled 'We are programmers of our own brains'. They record, perhaps in diary format occasions when they or a close friend/family member feel that their brains have been challenged; ie. Trying out for a school play or musical production; speaking in front of a school assembly; deciding about reporting an incidence of bullying etc. They should describe how they felt when preparing for this event, what they did to help them through it, how they felt when actually doing it; how they reacted to the results. For example, if they did not get the part in the school play or musical, how did they react? Did they feel they could try again next time? Did they look at how they could have done better? Did they walk away and not want to repeat the experience? Additionally, students can embark on a group activity to use health practices, behaviours and resources to enhance health, safety and wellbeing of their communities. For example they may develop posters to display in public places such as shopping centres or at school assemblies. This could be done in groups and connect to other classes ie. Art, IT etc.



Australian Curriculum links: Health & Physical Education

ACPPS073 Investigate & select strategies to promote health, safety & wellbeing.

ACPPS075 Analyse factors that influence emotions & develop strategies to demonstrate empathy & sensitivity.

ACPPS076 Evaluate health information & communicate their own & others' health concerns.

ACPPS077 Plan & use health practices, behaviours & resources to enhance health, safety & well being of their communities.