SAVE YOUR BRAIN SAVE YOUR BRAIN





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

Learning task: The impact of Illicit Drugs on the Developing Brain Focus on Vaping - 45 Minutes

TOPICS SUGGESTED SESSION TIME ALLOCATIONS

1. What we know about Vaping 15 minutes

2. Exploring Fact or Fiction 25 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, coachers, 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. WHAT WE KNOW ABOUT VAPING: 15 minutes

Online Classroom Task - Read through the notes below.

Vaping - 8 things we need to know

1. What is an e-cigarette, (vape)?

Introduced in the mid-2000's, as a safer alternative for traditional tobacco cigarettes as a way for people to quit smoking. However, there is insufficient evidence to show that Vapes are an effective quitting strategy. CLICK!

E-cigarettes are battery-operated devices that are used to heat a liquid to produce a vapour, which is then inhaled – mimicking the act of smoking. This is often referred to as 'vaping'. They are used to vape nicotine and other drugs including cannabis/marijuana and even chemicals like solvents, sweeteners and flavourings such as fruit, lollies, coffee or alcohol.

2. How would I recognise an e-cigarette (vape)?

Usually resemble cigarettes, cigars or pipes, as well as everyday items such as pens, USB memory sticks, and larger cylindrical or rectangular devices.

Other names: Electronic cigarettes, electronic nicotine delivery systems (ENDS), e-cigs, electrosmoke, green cig, smartsmoker, vaping, vape, pens, pods, Juul, e-hookah.

3. What are some of the health issues people who use them are now experiencing?

Most Vapes contain nicotine which has known negative health effects: for example nicotine is:

- extremely addictive
- can damage DNA
- can promote tumours
- linked to a number of different cancers
- harms the developing adolescent brain
- highly toxic to pregnant women and the unborn child

The aerosol in e-cigarettes often contains cancer causing chemicals that are dangerous to the lung such as:

- formaldehyde
- heavy metals such as chromium, aluminium, arsenic, copper, lead, nickel and tin all ofwhich cause adverse health effects, including cancer.
- chemicals found include volatile organic compounds (common in paint and cleaning products), ultrafine particles (which are damaging to lungs), 2-chlorophenol (used in disinfectants) and other carcinogens.
- Propylene glycol and diethylene glycol are ingredients used in vapes to create the appearance of smoke. They are the same chemicals found in radiator coolants to cool a vehicle's engine. Look at the smoke from someone vaping and compare it with that of an overheated car engine and you'll see the disturbing similarity.

Helpful resources:

E-cigarettes CLICK!

Vaping & E-Cigarettes While Pregnant: Safety Concerns & How to Quit **≪ CLICK!**



Vaping - 8 things we need to know continued...

4. What are the Safety issues being experienced?

E-cigarette batteries can explode, leading to serious injuries.

The batteries in e-cigarettes can overheat, catch fire, or explode. Over 200 cases have been reported in the UK and US, and in some cases, it has lead to serious injury and disability.

Companies glamourise their products to appear cool or fun, and create flavours that give off the perception of sweetness (such as candy or fruit flavoured) which appeal directly to young people.

Helpful resources:

The known harms of e-cigarettes and vaping CLICK!

Child/Teen Vaping, 'Skyrocketing' CLICK!

5. Where is Australian law falling short?

There has been no testing. Vapes are increasing in popularity, without any formal investigation into the impact of vaping on our health. The testing is on people who use e-cigarettes now. Governments have confusing laws and some are different in each state.

6. Vaping is a gateway to smoking tobacco.

Young people who vape are four times more likely to smoke cigarettes when they are older than those who don't. The hand-to-mouth action and the drawing of vapour into the lungs creates a muscle memory that predisposes them to picking up a smoking habit later on. There is no evidence that vaping helps people to quit smoking tobacco cigarettes.

Helpful resource:

AMA backs strong response to vaping deaths CLICK!

7. Vapes or e-cigarettes are being marketed to young people.

In 2015, the U.S. Surgeon General reported that e-cigarette use among high school students had increased by 900%, and 40% of young e-cigarette users had never smoked regular tobacco. This is particularly disturbing due to the rapid growth of the brain up until a person hits their mid-20s. Disrupting this process with nicotine use (which inhibits synapse formation) can result in serious, long-term health problems including memory loss, poor mood control and behaviour disorders.

8. Vaping is increasingly recognised as high risk and even a killer.

As of March this year, the United States Centres for Disease Control and Prevention (CDC) revealed there have been 68 deaths and 2,807 cases of e-cigarette and vapour associated lung injury (EVALI). Here is a story of a Sydney teen who was recently hospitalized, due to vaping – and nearly died. Dakota's doctors suspected COVID, but it was vaping that put her in ICU.

Helpful resources:

Teen Challenge CLICK!

What are the real dangers of vaping? CLICK!



1. EXPLORING FACT OR FICTION: 25 minutes

Online Classroom Task - Students try the quiz below. Teachers refer to following answer sheet.

Student Quiz: Vaping - True or Flase?

Circle what you think is the correct answer.

1. Vaping helps you to quit smoking regular cigarettes.	TRUE	FALSE
2. Teens are at greater risk of smoking tobacco cigarettes if they vape.	TRUE	FALSE
3. Vapes (e-cigarettes) contain chemicals and drugs that can result in lung, heart and brain disease.	TRUE	FALSE
4. E-cigarettes only look like cigars, pipes and normal cigarettes.	TRUE	FALSE
5. Vaping is never addictive and is safer than tobacco cigarettes.	TRUE	FALSE
6. E-cigarettes can explode and cause injury to the user.	TRUE	FALSE
7. In Australia, vaping, like other medical research, has been thoroughly investigated and tested to ensure high standards of product and content.	TRUE	FALSE
8. E-cigarettes are being actively marketed to teens as being 'cool' and safer than other forms of smoking.	TRUE	FALSE
9. There are now increasing numbers of deaths due to vaping; and rapidly increasing numbers of young people taking it up – even in middle schools.	TRUE	FALSE
10. Vaping is safer for pregnant women and the unborn baby than other forms of smoking.	TRUE	FALSE



OR





Student Quiz: Vaping - True or Flase? Teacher Copy - correct answers in dark blue.

1.	Vaping helps you to quit smoking regular cigarettes. See #1 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
2.	Teens are at greater risk of smoking tobacco cigarettes if they vape. See #6 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
3.	Vapes (e-cigarettes) contain chemicals and drugs that can result in lung, heart and brain disease. See #3 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
4.	E-cigarettes only look like cigars, pipes and normal cigarettes. See #2 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
5.	Vaping is never addictive and is safer than tobacco cigarettes. See #3 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
6.	E-cigarettes can explode and cause injury to the user. See #4 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
7.	In Australia, vaping, like other medical research, has been thoroughly investigated and tested to ensure high standards of product and content. See #5 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
8.	E-cigarettes are being actively marketed to teens as being 'cool' and safer than other forms of smoking. See #4 & 7 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
9.	There are now increasing numbers of deaths due to vaping; and rapidly increasing numbers of young people taking it up – even in middle schools. See #8 - 'Vaping - 8 things we need to know.'	TRUE	FALSE
10.	Vaping is safer for pregnant women and the unborn baby than other forms of smoking. See #3 - 'Vaping - 8 things we need to know.'	TRUE	FALSE



Portfolio/homework task:

- (a) Students review the news report about Dakota in this module and record their findings in their E Portfolio 'We are programmers of our own brains'. Their findings should include at least two main facts about the negative health impact of vaping on the brain, heart and lungs.
- (b) Students compile at least 5 statements they could make about vaping to inform their friends and family about the harms and risks.
- (c) Students compile 3 reasons why they would decline the request by a 'friend' to vape. For example:

REQUEST: All our friends are vaping; don't you want to even just try it? ANSWER: 'Sorry, the smell of it makes me feel sick. I'll see you tomorrow'. (walks away).

Helpful resource:



Image credit: Mike Mozart/Flickr

Australian Curriculum links: Health & Physical Education
ACPPS073 Investigate & select strategies to promote health, safety & wellbeing.
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.

