# Sample Lesson Plan – PDHPE

Year/Stage: Year 7-8/Stage 4

## **Syllabus reference:**

Strand 3: Individual and Community Health

Content:

Students learn about: **drug use** – *short-term and long-term effects of drugs on health and wellbeing* 

Students learn to: describe the short-term and long-term effects of tobacco

Outcome 4.6 A student describes the nature of health and analyses how health issues may impact on young people.

**Text:** Jump into PDHPE Book 1, Macmillan, Chapter 4, pp 80–84.

A Watt, M Nemec, B Dawe (1999)

**Language focus:** Explaining cause and effect, technical terms in anatomy and physiology, evaluating

# **Preparing for reading (Stage 1)**

Background knowledge: (review of previous learning)

- making lifestyle decisions
- body systems & organs, especially respiratory and cardiovascular systems
- addiction to nicotine and other drugs

**Summary of the text:** (dot-point for each section)

- Smoking kills thousands of people each year and makes thousands more very sick.
- When a smoker inhales, the nicotine goes straight into their blood and up to their brain the heart, blood, lungs and kidneys are all affected.
- Smokers become addicted to nicotine when they try to give up they suffer withdrawal symptoms that can be very bad.
- When they get addicted, people keep smoking over the years the long-term effects of smoking become evident in people's bodies.
- If they keep smoking for years, smokers are likely to get diseases that kill them or make them very ill and disabled, such as heart disease, stroke, gangrene, cancer and chronic respiratory disease.
- Because smoking is so bad for people's health, Australian governments have passed laws to try to stop young people from starting to smoke, and to protect people from passive smoking.

## **Detailed reading (Stage 2)**

Read each paragraph, discuss and have students mark key information. In this sample lesson plan, the information to mark is highlighted in the accompanying copy of the text.

Detailed reading may be performed on part of the text and/or may be set for students to complete individually or in groups

**Note:** Discuss the illustrations that accompany the text as it is read.

## Note-making from the text (Stage 3)

These following are examples of notes from the information highlighted on the accompanying text.

#### Consequences of smoking

- largest preventable cause of sickness and death in Australia
- over 19 000 people die each year long-term effects of tobacco
- pain and discomfort disability amputated limbs emphysema
- huge burden on our health-care system
- economic cost absent from work job performance \$9 billion each year

## **Immediate effects**

- Nicotine
  - rapidly absorbed into bloodstream
  - reaches brain within 7 seconds
- *Immediate effects:* 
  - increased heart rate and blood pressure
  - reduction of oxygen delivered to tissues
  - reduction of urine produced by kidneys
  - paralysis small hairs lining airways and lungs (cilia)
  - dizziness and nausea

#### Dependence

- effects of nicotine diminish with regular use larger amounts of nicotine to get the same effect developed a tolerance
- dependent if:
  - difficulties trying to give up smoking
  - continue to smoke don't enjoy it
  - overwhelming desire
  - smoke soon after waking up
  - unpleasant effects if you try to stop
- withdrawal symptoms:
  - tremors
  - nausea
  - sweating and dizziness
  - anxiety and irritability
  - headaches
  - concentration problems
  - increased appetite
  - restlessness and impatience
  - depression
  - fatigue
  - problems sleeping
- severity of effects will start to decrease after 3 weeks

#### Long-term effects

- skin wrinkles and ages prematurely
- shortness of breath
- stains the fingers and teeth
- fitness and performance in sport
  - impaired circulation
  - less oxygen in the blood
  - reduced endurance capacity
- more prone to certain diseases
  - damages the body's immune system
  - respiratory viral infections
  - malignant tumours

• 'smoker's cough' - cilia recover from their paralysis - remove all the irritants

### Heart disease

- damages the lining of blood vessels blood clots
- blocking of the arteries around the heart heart attack
- major preventable cause of heart disease
- 70 per cent greater chance of premature death

#### Stroke

- brain deprived of oxygen
- increases risk of stroke by at least 50 per cent

#### Gangrene

- loss of oxygen to surrounding tissues tissues die
- mainly in extremities fingers, hands, feet, toes amputated

#### Cancer

- thirty per cent of all cancer deaths
- 43 known carcinogens in tobacco smoke
- ten times more likely to contract lung cancer cancer of the stomach, bladder, kidney, pancreas, throat and mouth

## Respiratory disease

- chronic bronchitis and emphysema
- destroy the air sacs (alveoli) breathing difficulties pneumonia ten times the risk of bronchitis

#### Other health problems

- vision
- stomach ulcers
- smoking mothers underweight babies more stillbirths
- children of parents who smoke more likely to develop respiratory diseases

#### Smoking and the law

- legislation
  - dangers of passive smoking
  - reduce incidence of young people taking up smoking
- criminal offence sell tobacco products to people under 18 official proof of age

Note-making may be performed on part of the text and/or may be set for students to complete individually or in groups.

## Joint construction from notes (Stage 4)

This is an example of a text that could be written from the notes in Stage 3.

#### The consequences of smoking

Every year, the chemicals in tobacco kill over 19 000 Australians. Thousands more suffer from great pain and discomfort, disability, amputated limbs or emphysema. Unlike many other causes of death and illness, smoking is preventable, but it kills or makes more people sick than any other preventable cause. It wastes the resources of the health-care system and costs the economy around \$9 billion each year.

The immediate effects of smoking a cigarette include rapid absorption of nicotine into the bloodstream, reaching the brain within 7 seconds. The heart beats faster and blood pressure goes up, less oxygen gets to the body, the kidneys produce less urine, the cilia hairs that line the airways are paralysed, and the smoker may feel dizzy and nauseous.

With regular smoking, the effects of nicotine diminish, so the smoker needs more nicotine to feel the same effect. This is called developing a tolerance to a drug, so that users become dependent or addicted. Nicotine is a more addictive drug than heroin. Smokers are addicted to nicotine if they find it hard to give up, if they keep smoking without enjoying it, if they feel a strong desire for cigarettes, if they smoke first thing in the morning, and if they have withdrawal symptoms when they try to stop. Withdrawal symptoms from smoking include tremors, nausea, sweating and dizziness, anxiety and irritability, headaches, concentration problems, increased appetite, restlessness and impatience, depression, fatigue and problems with sleeping.

In the long-term, smokers' skin wrinkles and ages prematurely, they get short of breath, their fingers and teeth become stained, they lose fitness and performance in sport, particularly endurance, because they have less oxygen in their blood and less circulation. Smokers are also likely to get to diseases such as respiratory infections like flu or bronchitis because their immune system is damaged, as well as cancer. They also get 'smoker's cough', especially at night when their cilia recover from paralysis and try to get rid of the irritants that smoking leaves in the airways.

Smokers are more likely to get heart disease, stroke, gangrene, cancer and chronic respiratory disease. Because smoking damages the lining of blood vessels causing blood clots, the arteries around the heart can become blocked, causing a heart attack. Smokers have 70 per cent more chance of dying early from heart disease. Because smoking deprives the brain of oxygen, smokers are 50 per cent more likely to have a stroke, from blood clots in the brain. Because it reduces oxygen supply to the body's tissues, tissues die and become gangrenous, particularly in the body's extremities such as fingers, hands, feet and toes, which must be amputated. Because tobacco contains 43 known carcinogens, smokers are ten times more likely to get lung cancer, as well as stomach, bladder, kidney, pancreas, throat and mouth cancer. Smoking causes thirty per cent of all deaths from cancer. Because smoking destroys the alveoli, or air sacs in the lungs, smokers are ten times more likely to get chronic bronchitis, as well as pneumonia and emphysema, making it hard to breathe. Smoking can also damage the eyes and cause stomach ulcers.

Babies are more likely to be born underweight or dead if their mothers smoke. Children are more likely to suffer respiratory diseases if their parents smoke.

Australian governments have passed laws to prevent passive smoking or breathing in smoke from other people's cigarettes.

Joint construction may be performed on part of the text and/or may be set for students to complete individually or in groups.