

Digital literacy in Science Lesson Plan

Subject Area Science	Age Range Key Stage 3	Topic Smoking and health	Time 3 hours approx <i>(over several sessions)</i>
<p>Lesson - <i>Is smoking really bad for your health?</i> Students explore the effects of smoking on your health. They do this by arguing for and against whether smoking is bad for your health. Students carry out research using the internet – they are given a small number of websites to look at but must evaluate the evidence supplied on the websites, and identify which is opinion, fact or bias.</p>		<p>Prior learning Students should be familiar with and understand the basic science behind smoking: what is actually inside a cigarette, what the effects of smoking are, what diseases that they can cause.</p>	
<p>Curriculum references That conception, growth, development, behaviour and health can be affected by diet, drugs and disease. (NC 3.3c)</p>		<p>Differentiation <i>(Fill this in depending on your own class)</i></p>	
<p>Teaching objectives WALT: We are learning to...</p> <ul style="list-style-type: none"> • Understand the effects of smoking on your health. • Understand the differences between opinion, fact and bias and that it's not always easy to distinguish between them. • Understand that some information is designed to promote a point of view or to sell a product, service or idea. • Establish authority and trustworthiness of information by knowing the author / publisher. • Analyse and evaluate information judging its relevance and value (PLTS) 		<p>Learning outcomes WILF: What I'm looking for...</p> <ul style="list-style-type: none"> • To identify, through researching on the internet, what the possible effects of smoking are on your health. • To argue for and against using the evidence that you have researched. • To make a conclusion based on the evidence you have collected answering the initial question. 	
<p>Big Picture – TIBS: This is because...</p> <ul style="list-style-type: none"> • Understanding the effects of smoking on your health can help make sure students are aware of the dangers of smoking. • Understand that information on the internet may be biased, so it is important to establish the trustworthiness of information. 		<p>Success Criteria - What does 'good' look like? TBSY: To be successful you... Provide a balanced argument for and against the question 'Is smoking really bad for your health?'</p> <p>Reach a conclusion and justify this using the evidence that you have researched.</p>	
<p>Resources HTTP://NEWS.BBC.CO.UK/1/HI/4078841.STM HTTP://TOBACCOFREEKIDS.ORG HTTP://SMOKEFREE.NHS.UK/QUIT-TOOLS/MY-BODY/?GCLID=CORSM6PM6Z0CFYIA4WODSWPEKA HTTP://WWW.FORESTONLINE.ORG/OUTPUT/PAGELASP HTTP://WWW.SMOKERSCLUBINC.COM/ HTTP://WWW.COSTKIDS.ORG/ <i>Laptop and projector, interactive whiteboard, internet, PowerPoint, Word and access to computers.</i></p>			
<p>Starter Students enter the room while a relevant presentation / video about smoking is playing, and they are asked to write down 1 or 2 questions that they have about it.</p>			

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Lesson Plan

Main teaching activities

Lesson 1 – Developing Digital Literacy Skills

Introduce task and state objectives, outcomes and success criteria.

Using www.nwlg.org/digitalliteracy in pairs students complete the 'Do Homework Quiz', thinking about the reliability of information on the internet. Then go on and do the 'Points of View' activities, reading through the comments and then completing the 'Noughts and Crosses' game. The class then review what they have learnt through discussion.

Students then continue by completing the 'Believe it or Not' activity, reading through the opinions and making notes of important points. They then as a pair complete the 'Space Quiz', creating 3 more space quiz questions themselves. These should be tested out on at least two other pairs of students.

The teacher then gets students to connect what they have learnt with how they plan to carry out their own research next lesson. How will they evaluate websites now?

Lesson 2 – Planning & Researching

Introduce task and state objectives, outcomes and success criteria.

Research '**Is smoking bad for your health?**' using class textbooks and internet searches. During this research time groups need to think about bias in information. Stress the importance of getting a wide variety of sources from different sites. Students use the 'Kipling questions' (who?, what?, where?, when?, why?, how?) to evaluate the different websites.

Review students progress & reflect on what they have learnt

Lesson 3 – Students argue for & against, peer assessment & review

Introduce task and state objectives, outcomes and success criteria.

Students argue for and against '**Is smoking bad for your health?**' and then use peer assessment to judge the arguments for and against.

Plenary

Students discuss how effective they were at evaluating the websites and the information they collected. They reach a final conclusion on the question 'is smoking bad for your health?' and justify, using evidence.

They reflect on their own learning (*What was most successful? What do they need to do now to improve?*), and make a record of their thoughts. Some students then lead the plenary using the key questions and get feedback from the rest of the class.

Extension/Differentiation/Next 'steps'

Students could create a radio broadcast talk show on the topic 'Is smoking really bad for your health?'. They could create characters and a script, using the information they have collected.

Assessment opportunities

Questioning, students arguments for and against, peer assessment by students during activity and the final conclusions that students make.

Homework

Students could create their own website on smoking – called 'Is smoking really bad for your health?' and use the arguments created during the lessons.