20 *teaching ideas for AFL*

Prediction. What do students think will come next in the topic and why? Encourage them to use their imagination and to think creatively.

Einstein says'...' Make a statement concerning what students have learnt. Students stand if the statement is correct and sit if it is incorrect.

Learning ladder. What prior knowledge did students have which helped them understand this lesson? Can they order it, beginning with the most basic? Students draw a ladder and write each step in the spaces between the rungs of the ladder.

The same or different? Give students working in pairs, two similar statements. Are they saying the same thing? E.g. the statements might include keywords such as speed and velocity; 'cell' as in organism and 'cell' as in electricity; uterus and womb etc.

Explain the concept. Explain that a colleague wants to see if their students understand the concept of... What questions could be asked? What tasks could be set for them?

Crossword clue. Present a keyword. Students must come up with a pithy crossword-style clue for it. Differentiation: Come up with a cryptic clue or anagram.

Spectrum of understanding. Designate one side of the room as 'strongly agree' and the opposite side as 'strongly disagree'. Imagine a line joining them. Students position themselves along the line in response to statements such as 'I can describe what all today's keywords mean'.

How do you *know* this? E.g. light travels in straight lines – How do you know this? Take a statement from the lesson and ask students to explain how they know this.

Justify your place. Use in a practical lesson. Labs are crowded. Space on the tables is limited. Each piece of apparatus must justify its inclusion in the experiment. Students choose or are assigned a piece of apparatus. They must argue for their place in the practical.

Ambiguity. Focus on keywords used in the lesson which have a different or a broader meaning in everyday language e.g. mass, energy, cell. Can students compare this meaning to its meaning in science?

11 **Maths moment**. Can anything learnt today be expressed mathematically? E.g. cells – width of membranes would be measured in µm.

12 **Venn diagram**. Two or three circles drawn on a large sheet of paper. Working collaboratively students fill the diagram. Examples could include similarities/differences between igneous, sedimentary and metamorphic rocks; conduction, convection, radiation; arteries, veins, capillaries.

13 **What's your evidence?** Use in a practical lesson. Challenge students to describe the evidence they have for any statements they make about their investigation.

14 **Perfect answer**. Offer 3-4 exam questions. Students choose one and come up with an answer which includes keywords from the lesson. Show the mark scheme. How could they improve their response?

15 **Perfect answer 2**. Have 5-6 exam questions positioned around the room, each with a large sheet attached. Students visit each question and write a response. Then give groups of students one of the papers. They write the best answer they can drawing on all the correct responses.

16 **Picture this**. Show two apparently unrelated images. Can students describe a connection between them and the lesson/topic?

17 **Why is it?** Why is carbon an example of an element? Why is a seagull an example of a vertebrate? Give a couple of examples and then challenge students to come up with their own question (and response) connected with the lesson. These can be swapped.

18 **Why is it wrong?** Give students examples of poor answers to exam questions. To aid differentiation, some answers may be plainly incorrect but others could just be weak or inaccurate. Students decide why the response did not gain top marks.

19 **How many answers?** Give a question and explain that this has two (three, four or more) answers. Working in pairs, how many answers can they come up with?

20 **Elaboration.** Make a statement or draw a diagram and ask what else they know. Can they elaborate? This could be used to develop a mind map of connections.

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