

# TOPIC 2

## Language of learning

### 2.1 Overview

What do you know about ‘big picture’ learning? Your brain may have trouble taking on a whole concept or big idea at once ... so you can ‘nibble away’ at a concept and build a model up over time. To do this, it often helps to be able to map out your learning journey so that you know where you are going.



#### 2.1.1 Think about learning

**assessment**

- Which coloured hat should you ‘wear’ to think creatively?
- What’s the difference between a ‘fat’ and a ‘skinny’ question?
- What can you do to make a good first impression?
- How do we communicate our feelings without using words?
- Who gave dinosaurs their names and why?
- What do emotions have to do with memory?

#### LEARNING SEQUENCE

2.1	Overview	39
2.2	Problem solving with thinking hats	eBookplus
2.3	The language of understanding	eBookplus
2.4	At first glance	eBookplus
2.5	Coded communication	eBookplus
2.6	Telling tales	eBookplus
2.7	Cartoon quest	eBookplus
2.8	Unlocking meaning	eBookplus
2.9	Total recall?	eBookplus
2.10	Thinking tools: Venn diagrams	eBookplus
2.11	Review	eBookplus

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at [www.jacplus.com.au](http://www.jacplus.com.au). They will help you to learn the concepts covered in this topic.

## 2.1.2 Your quest

### The three-floor thinking model

On what floor is your thinking?

**First-floor thinkers** gather information. It is on this floor that the groundwork is laid.

**Second-floor thinkers** process the information. On this floor, thinkers decide which information is relevant and which is not, and then try to make some sense of it. This may involve brainstorming and playing with the ideas, looking for patterns or analysing data.

**Third-floor thinkers** apply information. They understand what needs to be done and complete it. On this floor, tasks are prioritised and further ideas are synthesised or evaluated. This may also be the floor for assembling the parts and adding the creative finishing touches.

#### Investigate, design and create

1. Select a project topic from one of the following and use the three-floor thinking model to gather, process and apply your information. Include information on the chemical and physical properties of your selected topic. Invent, design and construct a model of a device or method that would help to:

- identify a range of common rock types
- sort household wastes
- recycle household wastes
- test the effectiveness of detergents
- test the effectiveness of toothpaste.

2. Use the three-floor thinking model to gather, process and apply information about an example of how science informs laws and guidelines about health or our environment. Present your findings as an advertisement that incorporates multimedia or animation to effectively communicate the relevant scientific understanding behind the law or guideline. You may select one of the following examples or identify your own

example. Some examples of laws and guidelines influenced by our scientific knowledge include:

- quarantine laws
- food handling laws
- bushfire safety guidelines
- laws about the wearing of seatbelts
- chemical storage guidelines
- fire restriction laws.

Are you on your first, second or third thinking floor?

