

# **CFU Thinking**

Checking for Understading is a fundamental aspect of teaching and learning. Here are a few simple techniques:

The noblest pleasure is the joy of understanding.
Leonardo Da Vinci

My mother said I must always be intolerant of ignorance but understanding of illiteracy. That some people, unable to go to school, were more educated and more intelligent than college professors. Maya Angelou

## How It Works

Defining 'understanding' is tricky; deeply philosophical. Keep it simple in class: Understanding = being able to describe, explain, use and connect ideas, concepts or objects. To know whether your pupils really understand something, collect reliable and relevant evidence from them. Do this through a series of pre-set questions and routine observations. This is CFU Thinking. See below for 6 (of many) CFU techniques.

# Knowledge, Skills & Attitudes

In order to understand a new piece of knowledge, an idea, a skill, a concept or a technique pupils need three things: information, feedback and metacognition. They need the facts necessary for understanding; they need to be told that they've understood; and they need to believe/realise for themselves that they understand. Make these three aspects of learning explicit to your pupils as they tackle new material.

### **Prove It**

ASK:

'How can you best prove that you really understand it?'

### 4 Checks

ASK:

'What is it?'
'What does it relate to?'
'How does it fit in?'
'Why is it important?'

### 1-10 Scale

ASK:

'On a line from 1 to 10, how well do you understand it?' (answer n)

THEN ASK: 'Why not n+1?' 'Why not n-1?'

# **Applications**

- New and difficult facts
- New and difficult skills
- New and difficult concepts
- As a set of formative assessment techniques
- As a set of techniques for pupils to use with each other in genuine collaborative activities

Understanding will need repeated revision if it is to embed.

Review key points after 1 hour, 1 day, 1 week, 1 month.

# Extensions, Adaptations, Variations

- Develop the idea of a positive error culture so that pupils are comfortable admitting that they don't yet understand.
- Create scripts for pupils to use in order to scaffold their expression of their understanding:
  - -I know I understand this because...
  - -I know I don't yet understand this because...
  - -To understand this better I need to...
  - -Because I understand this I can...

Evidencing the understanding younger pupils may require more detailed observation over time if they are less able to express what they know.

### Test It Out

Include just one of the six techniques below in your next lesson.

What happened:

## Planned Scan

Once pupils are working independently, carry out a predefined scan of 5 areas in the classroom. Include: lowest ability pupil; highest ability pupil, 3 from the mid-range. What does this tell you?

#### 1-10 Line

Pupils draw a line in their books and mark 1 & 10. At set points in the lesson they pause and mark on the line how confident they are in their understanding. Moderate their responses using targeted questions.

#### Meta-Stand

ASK:

'How do YOU know that you understand this?'

'How would you know if SOMEONE ELSE understands it?'