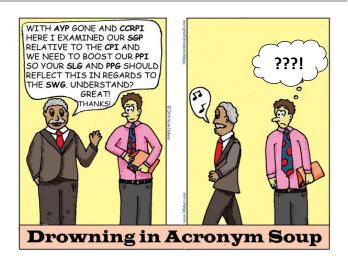
# **Teaching and Learning – 5 minutes**

...over a hot brew!

Research, Resilience, and Reflection

Issue 27:

#### 1. In Pictures:



Clarity of communication is Key at all times!

### 2. Education Research: Self-regulation

Self-regulation – the ability to steer our own behaviour and learning – is a strong predictor of attainment and future success. A key aspect of this is emotional regulation (Gutman & Schoon, 2013). This is important because negative pupil emotions can lead to pupils avoiding a task (Kluger & DeNisi 1996) and also because the ability to regulate one's emotions affects pupils' ability to learn, success in school and future life (EEF, 2017). Effective self-regulation also requires pupils to develop metacognitive strategies – how they plan, monitor and evaluate their approaches to specific tasks. Teacher support for pupil metacognition is likely to increase pupil self-regulation, success and therefore motivation (EEF, 2017).

#### 3. To ponder...

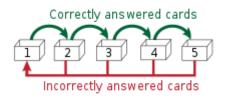
"There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning."

[Jiddu Krishnamurti]

## 4. Teaching Strategy: Brighten Lines

In the 1970s, a German populariser of science, Sebastian Leitner, developed a method of studying flash cards that makes learning the material much more efficient and effective (using **spaced learning/retrieval technique**). In this method, you use multiple stacks of cards. The illustration below shows five boxes, but you could use three or five. (Two is probably too few, more than five too many.)

All the cards start off in Stack 1. As you review the cards, each card you answer correctly goes into stack 2. If you give the wrong answer, study the card and then return it to stack 1. When you review the cards in stack 2, if you still get the answer right, the card is promoted to stack 3, and so on until all the cards are in the highest box.



If you get an answer wrong on a card in stack 2, 3, 4 or up to the highest box you are using, the card is demoted all the way down to stack 1.

The key to the efficiency and effectiveness of the Leitner system is that the cards in the lower boxes--the ones you know less well--are reviewed more frequently than the cards in the higher boxes. For example, in a four-box set up, the cards in stack 1 should be reviewed more frequently than those in stack 3 i.e. Stack 1 = 3 times a day; Stack 2 = 2 times a day; Stack 3 = 1 time a day.

The cards known best are reviewed with increasing time between so promoting **spaced retrieval** technique and therefore **greater long-term memory outcomes**.

