# Teaching and Learning – 5 minutes
## *…over a hot brew!*

*Research, Resilience, and Reflection*

Issue 39:

## 1. Differentiation



## 2. Teaching Techniques:  Strong Start

**What is it?** Establish an efficient routine for students to enter the classroom and begin class; 'Strong Start' bridges the point of threshold with the beginning of a 'Do Now' task**.**

**Why do it?** A strong routine at a lesson's start sets the tone for all that follows.  A strong routine opening sets a pace and energy and in doing so socializes students to work with discipline, urgency, and efficiency.  Fail to do so can result in all the opposites.

**What does it look like?**  A typical Strong Start routine might include

- a clear reference to a seating plan (maybe already established),
- a routine collection/distribution of material(s) if appropriate (.i.e. calculator, apron, text book/exercise book, coloured pens).
- The teacher should narrate positive behaviours on entry, although ultimately the aim should be to have such strong routines that the teacher should not need to comment.

## 3. What is Long Term Memory?

In 2006 Paul Kirschner published, with John Sweller and Richard E Clark, a now-seminal piece of research which aligned the concept of learning with changes in long term memory.  However, long-term memory, although much referred to by theorists, is rarely explained in terms of function and importance.  Here is Kirschner's description of what Long Term Memory is.

"There are two essential components that influence how we learn: long-term memory (LTM) and working memory (WM; often called short-term memory). LTM is a big mental warehouse of things while WM is a limited mental 'space' in which we think. However, to dispel a common misconception, LTM is not a passive repository of discrete, isolated fragments of information that permit us to repeat what we have learned, having only peripheral influence on complex cognitive processes such as critical thinking and problem solving. It is, rather, the central, dominant structure of human cognition. Everything we see, hear and think about depends on, and is influenced by, our LTM. Expert problem solvers, for example, derive their skill by drawing on the extensive experience stored in their LTM in the form of concepts and procedures, known as mental schemas. They retrieve memories of past procedures and solutions, and then quickly select and apply the best ones for solving problems. We are skilful in an area if our LTM contains huge amounts of information concerning the area. That information permits us to quickly recognise the characteristics of a situation and indicates to us, often immediately and unconsciously, what to do and when to do it. And what are the instructional consequences of LTM? First and foremost, LTM provides us with the ultimate justification for instruction: the aim of all instruction is to add knowledge and skills to LTM. If nothing has been added to LTM, nothing has been learned."

## 4.  To ponder…

"You can never be overdressed or overeducated." [Oscar Wilde]

## 4.  To watch

[(56) Designing Teaching & Understanding Learners with Dylan Wiliam, Mind the Gap, Ep. 55 (S3E11) - YouTube](#)

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