Teaching and Learning – 5 minutes

...over a hot brew!

Research, Resilience, and Reflection

Issue 41:





1. Metacognition

Cost	Evidence Base	Months Gained
£££££		+8

Meta-cognition and self-regulation approaches have consistently high levels of impact, with pupils making an average of eight months' additional progress. The evidence indicates that teaching these strategies can be particularly effective for low achieving and older pupils. These strategies are usually more effective when taught in collaborative groups so learners can support each other and make their thinking explicit through discussion.

2. Teaching Techniques: Name the steps

What is it? The teacher breaks down complex tasks into simple steps that form a path for student mastery (as highlighted in Rosenshine's Principles of instruction). Why do it?

It creates clarity – the student knows what they are trying to do in detail

The named steps become 'sticky' which means that practice is more accessible when the teacher is not available to monitor which encourages autonomy.

The named steps become 'sticky' which means that all stages of a routine will be practiced – Remember perfect practice makes perfect – imperfect practice reinforces imperfection.

Named stages can be easily communicated in future teaching scenarios – they can be used as prompts and as part of a questioning sequence... what is the next stage? Why is that? What can go wrong here? Having done that, what is the nest stage?

What does it look like?

Break a complex problem down into small steps.

- Name the steps so they become more memorable (sticky)
- Use/refer to the steps as part of routine.
- Use the named steps in retrospect as part of a retrieval process
- Use the named steps as a questioning framework

3. Metacognition

Metacognition is a term teachers frequently refer to (it's up there alongside words such as resilience and differentiation in that respect). It is essentially a term used to describe how individuals think about and manage their own thinking... but what does that mean with regards to an individual's learning behaviours? These behaviours can be broken down into the things people do before, during and after tasks.

Before tasks: metacognition is thinking about how you are going to approach the task. This involves thinking to the past, and what knowledge you have that might help; this knowledge includes what you know about different strategies, including when and why different strategies are useful. Metacognition is using this knowledge and all the information you have about the task, to set personal goals, and to plan what you are going to do.

During tasks: metacognition is thinking about your progress. Are you stuck? Are you on track — will you achieve your goal if you keep going as you are? Metacognition is using this knowledge to make changes and adapt as you complete the task. Could you tweak things to improve your work? Are there any strategies you could use to help you? For example, could you ask someone for help, or use a specific tool?

After tasks: metacognition is reflecting on the task by thinking about the process as well as the product: Did you use strategies well? Was your plan useful? Metacognition is using reflection as a tool to develop understanding to take forward into the future: Would you do anything differently next time?

4. To ponder...

"Education is the key to unlock the golden door of freedom"

[George Washington Carver]

4. To watch...

https://www.youtube.com/watch?v=UCFg9bcW7Bk

