A. BUILD KNOWLEDGE

Managing cognitive load
When presenting new information as part of professional development, careful thought should be applied to managing the cognitive load of participants. This could involve:
- removing less relevant content;
- focusing only on the most relevant content;
- varying their presentation via the use of multiple examples;
- employing strategies such as dual coding—the combination of verbal and visual instruction.

Revisiting prior learning
PD is more likely to be effective where designers:
- revisit previous topics or techniques later in the programme;
- quiz participants on information provided in past sessions;
- use tasks that require teachers to draw on past learning.
This emerges from research relating to retrieval practice, which theorises that recalling information makes it more likely that the learner will retain what has been taught.

B. MOTIVATE STAFF

Setting and agreeing on goals
When conscious, specific and sufficient goals are set during professional development, it is more likely that practice will change and performance will improve. Goals often work best when the behaviour change is explicitly described. For example, if the aim is to improve metacognitive knowledge, a suitably specific goal might be to improve learners metacognitive knowledge by including explicit modelling of your thinking, through demonstrating and describing your thought processes using a visualiser.

Presenting information from a credible source
The more credible the source of information, the more likely teachers are to change their practice in response. Useful methods that make teachers more likely to follow suit may include:
- supporting a suggestion with published and robust research;
- featuring a prominent education academic to advocate for a change;
- using an expert teacher to promote a particular practice.

Providing affirmation and reinforcement after progress
Providing affirmation and reinforcement after a teacher has made an effort to alter their practice, or shown progress in performing a new skill, can improve teachers' motivation to act upon professional development. This should come after the change has been attempted (rather than before).

C. DEVELOP TEACHING TECHNIQUES

Instruction
PD programmes that incorporate clear and considered guided instruction on how to enact specific techniques are more likely to positively impact pupil attainment. This should be underpinned by evidence drawn from trusted sources.

Social support
Peers often share a common language, culture, and knowledge regarding the problems they face in the classroom and are often able to provide emotional or informational assistance that supports a trainee in improving their practice. This could be offered using a variety of methods, e.g. coaching, regular meetings to discuss progress, and teachers working in pairs or triads.

Modelling
Provide an observable sample of performance, either directly in person or indirectly (via film or pictures), for a teacher to reflect on or imitate. This could be videos of what effective practice looks like, or having it modelled by an expert practitioner.

Monitoring and feedback
Supportive and formative feedback from coaches or peers can have a positive impact on performance. This should be clearly differentiated from high-stakes lesson observations linked to appraisal targets.

Rehearsal
Prompt practice and rehearsal of a technique, at least once in a context outside of the classroom, may support teachers to enhance their skills and embed new habits.

D. EMBED PRACTICE

Providing prompts and cues
To ensure that teachers continue to alter and improve their practice, PD may provide a series of prompts and cues that nudge and remind teachers to carry out certain behaviours.

Prompting action planning
Action planning is where a teacher plans how they will perform a technique, and their plan should include details around the context, frequency, duration, and intensity of when they will make use of the technique. It can include lesson planning, where teachers may attempt to use a technique learned in PD in a specific lesson.

Encouraging monitoring
PD may be more effective if it supports teachers to monitor and record their own performance. For instance, teachers could be provided with reflective journals where they record their actions towards a specific goal and reflect on the success of them.

Prompting context specific repetition
Prompt teachers to rehearse and repeat new behaviours in the same context as it would usually be delivered—in the classroom. Repeating the same action in the classroom, at least twice, can support the embedding of practice.