

Is Effective PD Rocket Science?

Payload

Telemetry

Fuel

Oxidizer

Motor

Instructional Strategy

A positive change in practice is only beneficial when in routine classroom use, just as a satellite only delivers value in orbit.

Building Knowledge (1, 2)

Teachers need to fuel their development by creating a deeper understanding of teaching and learning needs. Like a rocket's fuel, it needs to be combined with the oxidizer to create thrust.

Embedding Practice (11, 12, 13, 14)

Supporting the application of technique and knowledge in the pursuit of an aim is like a rocket motor combining oxidizer and fuel to create thrust. The motor sustains and directs the reaction to keep the rocket going in the right direction.

Motivating Teachers (3, 4, 5)

Like rockets need telemetry, teachers need guidance. What's the destination? What goals do we have for teaching and learning? Are we on track? Do we have enough energy to get there?

Developing Technique (6, 7, 8, 9, 10)

In a rocket, the oxidizer releases the energy from the fuel. In PD, teachers need to develop their technique in order to release the knowledge they have stored.

Mechanisms Of Effective PD

- 1. Managing cognitive load
- 2. Revisiting prior learning
- 3. Setting and agreeing on goals
- 4. Presenting information from a credible source
- 5. Providing affirmation and reinforcement after progress
- 6. Instructing teachers on how to perform a technique
- 7. Arranging social support

- 8. Modelling the technique
- 9. Monitoring and providing feedback
- 10. Rehearsing the technique
- 11. Providing prompts and cues
- 12. Prompting action planning
- 13. Encouraging monitoring
- 14. Prompting context-specific repetition

