Implementation of the 7 Principles in Computing

Subject knowledge

-Computing taught discreetly by one person. Training completed by this person - The National Centre for Computing Education Certificate in Teach Primary Computing
- CPD videos for teacher explaining learning journey.
-Recap notes and specific knowledge needed included into explicit lesson plan
- 30 min directed time/week focused on delivery

Explanations

-Prepared power points including explanations of key knowledge and concepts for learning.
-Dual coding enabled and considered in development of materials.
-30 mins directed time/week to focus on quality and clarity of explanations
-Crib sheets provided

Questioning and responding

- -Retrieval questions in built throughout topic.
–Lesson plans include a variety of questioning strategies and suggestion for idea of pupil response
-Suggested teacher responses and deeper thinking also supported on plans

Feedback to feedforward

- Weekly retrieval opportunities at the start of each lesson Use of computational attitudes to help feedback to feed forward
- Coaching strategies used with children to help them problem solve
- Continued testing and debugging until a product is refined
- Peer assessment

Modelling

-Teacher is supported with modelling through CPD provided
–Thinking tools embedded through the units for reflection and to support learning
-Paired modelling with University of Portsmouth students.
-Plan to work with computing dept a TPA
-Peer to peer

Metacognition

-Progression document, use of same technical language
-Planning and structure of each lesson is similar
-Greater understanding of disciplines used and needed in subject, as a result of discreet teaching. This leads to application of these disciplines in future lessons.

Meta-memory

-Dual coding opportunities. E.g. between computer and workbook.
–Consistency of language developed over time, through year groups.
–Retrieval practice throughout lessons, specifically at the start of lessons.
– At start of units reflect on units before
-Reflect on skills used at the end of each unit in their online Skills Journal