



PROE

Supporting science inquiry

PROE is a tool to engage students in the investigative process and support deep thinking.



Predict what they think will happen in an investigation.



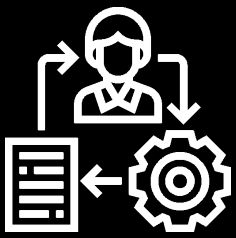
Give **Reasons** for their prediction.



Observe what happens.



Explain why they think these things happened and compares it to their prediction and the findings of others.

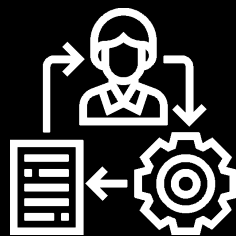
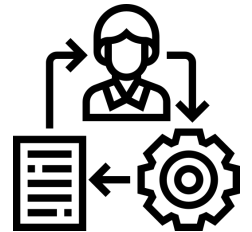


How?

- Implement with a class, collaborative teams or individually, use discussion, written format, or both.
- Complete P and R prior to investigating. When thinking scientifically, predictions are always linked to our current understanding.
- Complete O while investigating.
- Complete E after investigating.

Why?

- PROE enables teachers to monitor students thinking, ask questions and provide feedback to guide inquiry.
- Using PROE affords students experience with developing argumentation skills through science inquiry.



Supporting learning

- Catering for student diversity is embedded in PROE, as students are encouraged to respond using current ideas and observations drawn from experience.
- Depending on its purpose, for early years use POE, omitting the need for students to provide a reason for their initial ideas.



Gathering data

Evidence of students':

- alternative conceptions
- reasoning
- observation skills
- recording skills
- ability to adjust their thinking, and make new claims based on observations

