St Filumena’s Catholic Primary School

Our Agreed Science Principles and the Impact on Teaching and Learning
Summary of Content

This exemplar illustrates how powerful Science Principles can be when they underpin Teaching and Learning.

Created by the entire school community, they have now become an intrinsic part of planning, driving the science curriculum and enabling outstanding scientific experiences for all.
What the school says

The agreement of a set of Science Teaching and Learning Principles has been a good vehicle for raising the standards and the profile of science across our school.

They have created a greater focus as teachers, pupils and parents agree what an outstanding science lesson should be like.

They have helped us monitor progress, raise standards and generally increase awareness of exactly how science is taught in our school.
How we agreed our Science Principles

Teachers and pupils discussed what Science means to them.

Letters were sent to parents asking for their opinion on science in school and what makes it outstanding.

We agreed 12 principles and ordered them, 1 being the most important. The final list was produced in 12 ‘bubbles’ and laminated for each classroom.
Click on a Science Principle to see it in action.

We use science vocabulary & learn new words.

We agree Science is outstanding when............

Pupils are aware of what they need to do to achieve the next level.

Motivation is high enabling pupils to develop work at home returning with results for class discussion.

Pupils enjoy their science lessons & always look forward to them.

When visitors come to school to teach science & when we travel to places on educational visits.

When we use a variety of equipment properly & safely.

Sample planning materials. Ref slides 46, 47, 48.

Pupil voice Elements of displays.
Science Principles
Slide References

Teachers have good subject knowledge to challenge high achievers

Children are aware of the purpose & objectives of their learning

We agree Science is outstanding when......

Lessons are well planned & resourced

Pupils are challenged at every level in all lessons

All pupils are excited & engaged in their learning

Planning/Enrichment

Assessment

Pupil voice/Impact
Our Science Principles Display showing a gallery of science work produced by all classes across the school.

The 12 'Bubble' Science Principles agreed by teachers, pupils and parents are the focus of the display. All pupils produced work, some showing evidence of the subjects, Art, D&T, Drama, ICT which is sometimes taught through science. The impact of this has been clear. The children not only enjoy seeing their work displayed but also it encourages discussion each time they enter the hall.
The impact for our school was ..... 

• APP has given a clear and specific idea of what children can do and how they need to improve.
• Collaborative skills for the children have improved with more ‘science discussion’ and increased emphasis on investigations.
• teachers are now more confident, especially in science enquiry
• pupils enjoy lessons even more
• parents become acutely aware of the science their child is learning, as they talk about science at home and ask to bring in resources for lessons.
The agreement of a set of Science Principles has been a good vehicle for raising the standards and profile of science across our school.

The rationale for starting the PSQM Award was always to monitor progress, raise standards and generally increase everyone’s awareness of exactly how science is taught in our school.

The Science Principles have created a greater focus as teachers, pupils and parents agree what an outstanding science lesson should be like.
What we will do next

We will continue to use our Principles to help us provide this level of science fun and learning and to constantly evaluate lesson objectives and methodologies in pursuit of high level science education.

Teachers are encouraged to question the children during the plenary about the quality of the experience and this informs future planning.