



Science Policy

Policy Code: Curr - SP
To be Reviewed: 2020
Ratified: 2017

Identity Statement

To provide a school community that draws on the traditions of the Brigidine Order, that celebrates life, reaches out to others and actively cares for our world.

Vision Statements

St Patrick's Primary School strives to:

- Guide and support students on their faith journey through experiences of the Catholic tradition, building a strong sense of belonging, responsibility and wonder within our school, church and global communities.
- Develop an environment that builds on student resilience, self - respect, confidence and empathy – in partnership with families.
- Foster a learning environment that provides a holistic education that nurtures all learners in order for them to realise their full potential.
- Model and foster a safe and supportive environment for students and their families within the school community.
- Provide learning and teaching experiences that promote decision making.
- Conserve God's creation and recognise the traditional owners of the land.

Graduate Outcomes

We endeavour to create graduates who will:

- Have a dynamic faith
- Be committed to social justice
- Be environmentally aware
- Develop and sustain loving relationships
- Be life-long learners
- Realise their potential
- Be creative problem-solvers
- Be resilient, confident and independent
- Be respectful
- Have courage and integrity
- Be self-aware
- Enjoy their experiences

Basic Beliefs

Science provides a way of answering interesting and important questions about the biological, physical and technological world. It provides opportunities for students to develop an understanding of important science concepts and processes and the practices used to develop scientific knowledge. The science curriculum develops the student's awareness of science's contribution to our culture and society, and its applications in our lives. Science develops critical and creative thinking skills and challenges students to identify questions and draw evidence-based conclusions using scientific methods.

Aims

The Science curriculum aims to ensure that students develop:

- an interest in science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live
- an understanding of the vision that science provides of the nature of living things, of the Earth and its place in the cosmos, and of the physical and chemical processes that explain the behaviour of all material things
- an understanding of the nature of scientific inquiry and the ability to use a range of scientific inquiry methods, including questioning, planning and conducting experiments and investigations based on ethical principles, collecting and analysing data, evaluating results, and drawing critical, evidence-based conclusions
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims



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- an ability to solve problems and make informed, evidence-based decisions about current and future applications of science while taking into account ethical and social implications of decisions
- an understanding of historical and cultural contributions to science as well as contemporary science issues and activities and an understanding of the diversity of careers related to science
- a solid foundation of knowledge of the biological, chemical, physical, Earth and space sciences, including being able to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge.

Agreed Major Teaching and Learning Strategies:

Science is to be integrated into the curriculum where possible via an inquiry-based unit.

The Science curriculum has two interrelated strands: Science Understanding and Science Inquiry Skills. Together, the two strands of the science curriculum provide students with understanding, knowledge and skills through which they can develop a scientific view of the world.

Science Understanding

- Science as a human endeavour
- Biological Sciences
- Chemical Sciences
- Earth and Space Sciences
- Physical Sciences

Science Inquiry Skills

- Questioning and predicting
- Planning and conducting
- Recording and processing
- Analysing and Evaluating
- Communicating

Together, the strands of the science curriculum provide students with understanding, knowledge and skills through which they can develop a scientific view of the world. Students are challenged to explore science, its concepts, nature and uses through clearly described inquiry processes.

Science Education follows the experiential approach as follows:

- Experiences (Teacher/Child initiated)
- Curiosity/Prediction/Hypothesis
- Fair Testing
- Data collection
- Experimentation
- Evaluations (Refine hypothesis)
- Concept (Using and internalising concept)
- Analysis/Conclusion

Organisation:

- Whole school scope and sequence on a two-year cycle.
- Science is taught as a specialist program and through class inquiry units.

RESOURCES

Core Curriculum Resources:

- Victorian Curriculum
- Primary Investigations in Science (Prep – 6)
- Science Connections
- STAV
- Primary Investigations
- SEED member



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Support Curriculum Resources:

Primary Science

A variety of online resources including CSIRO, Monash University Teacher Resource, Qwestacon, ABC.

Major Teaching and Learning Resources:

Victorian Curriculum and the Inquiry Approach to learning

Assessment:

- Observation
- Modelling
- Product assessment
- Oral questioning
- Journal piece
- Rubrics
- Peer evaluation
- Self-assessment.
- Multi-media presentations and projects

Record Keeping

- Student's work
- Student's folders
- Journals
- Checklists

Reporting

- Informal meeting with parents
- Parent/teacher interview and oral report
- School report

DEVELOPMENT:

- At the end of each year, Science co-ordinator to audit consumerable resources and re-order for the following year.

Policy will be reviewed on a three-year cycle.

Principal Signature: _____

Board Member Signature: _____