St. Leonard's Catholic Primary School

Aspiring to Excellence

Digital Technologies Policy

RATIONALE:

Through Digital Technologies we will inspire our community to acquire and apply specific ways of thinking about problem solving to create innovative, purpose-designed digital solutions.

Computational thinking is at the core of our Digital Technologies curriculum. We can unlock the potential of learners through analysing problems and precisely and logically designing solutions that can be understood and carried out through the use of programming languages. Design and systems thinking also contribute to the problem- solving approach in our current curriculum.

Furthermore, in a world of an increasing knowledge economy it is vital students have the skills required to be effective problem solvers, enabling them to function at a higher level and process this information. Skills such as collaboration, creativity, critical thinking and effective communication have become essential for students to enable them to take on jobs that will be created in the future.

The Digital Technologies Curriculum along with the Design and Technologies Curriculum sit within the the overarching Technology Learning Area of the Victorian Curriculum.

AIMS:

The Digital Technologies curriculum aims to:

- empower students to move from being users and consumers of digital systems to be discerning and creative problem solvers, equipped for an increasingly knowledge-based economy and society
- design, create, manage and evaluate sustainable and innovative digital solutions to meet and redefine current and future needs
- use computational thinking and the key concepts of abstraction; data collection, representation and interpretation; specification, algorithms and development to create digital solutions
- apply systems thinking to monitor, analyse, predict and shape the interactions within and between information systems and the impact of these systems on individuals, societies, economies and environments
- allow students to confidently use digital systems to efficiently and effectively automate the transformation of data into information and to creatively communicate ideas in a range of settings

- apply protocols and legal practices that support safe, ethical and respectful communications and collaboration with known and unknown audiences

Implementation:

- Teachers will use the content descriptors set out in the The Victorian Curriculum F-10 to design the teaching and learning program to enable students to achieve the standards. Victorian Curriculum Content Descriptors
- The Digital Technologies strands Digital Systems, Data and Information, and Creating Digital Solutions will be covered across a two year cycle.
- The individual learning abilities of students are to be taken into account when planning so that opportunities are provided to cater for the identified needs of all students.
- As this is a new curriculum, older students may need to begin their learning at the lower levels to ensure competency. Please note that the Digital Technologies curriculum has been written in bands (mainly two levels per band) and there are achievements for the end of each band so there is some flexibility in designing learning and teaching programs.
- Around 50% of the curriculum can be taught without the use of a computer. This will be referred to as 'unplugged' learning.
- Some aspects of the curriculum can be integrated with other curriculum areas. For example data collection could be taught in Mathematics in the lower levels.
- The IT Coach will not be in charge of teaching the Digital Technologies curriculum but may well cover some areas of this curriculum during these sessions.
- The Design Thinking model of teaching has been adopted throughout the school. This style of thinking is covered in the Digital Technologies curriculum.
- Students have been given access to Chromebook computers in order to allow them to have access to online content, activities and programs that promote their understanding of the Digital Technologies curriculum.
- The school will invest in it's infrastructure that supports the use of a variety of different forms of technologies.
- PD in the Digital technologies curriculum.
- We will endeavour to investigate the possibility of creating STEM program at St Leonard's
- Budget available to purchase tools to enhance curriculum

Resources:

http://www.digipubs.vic.edu.au/pubs/digitaltechnologies/digital-technologies-curriculum

https://studio.code.org/

https://www.youtube.com/watch?v=C-oAyXibnJU

https://csermoocs.adelaide.edu.au/

Evaluation:

This policy was last reviewed in 2018.

This policy will be reviewed as part of the school's four year review cycle.