



Progression of Skills



Digital Technologies
Coordinator



Aspect

★ Statement

Digital Technologies Knowledge and Understanding

Recognise and explore digital systems (hardware and software components) for a purpose.

Recognise and explore patterns in data and represent data as pictures, symbols and diagrams.



Students recognise and use a variety of hardware to access different software. They can easily login, navigate and save files in Purple Mash. Students can capture and insert data by adding photos in Mashccams. They can recognise that digital systems follow commands and can enter simple instructions to make an object move in 2Go and 2Code.

Students can engage, explore and collate digital content e.g. students can follow simple instructions to access online resources, use Purple Mash 2Quiz example (sorting shapes), 2Code design mode (manipulating backgrounds) or using pictogram software such as 2Count.

Aspect

★ Statement

Digital Technologies Processes and Production Skills

Collect, explore and sort data, and use digital systems to present the data creatively.

Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems.

Explore how people safely use common information systems to meet information, communication and recreation needs.

Create and organise ideas and information using information systems independently and with others, and share these with known people in safe online environments.



Students can sort, collate, edit and store digital content e.g. students can name, save and retrieve their work and follow simple instructions to search and select images to create texts, collect class data and presenting this as a visual display such as a pictograph in 2Count, enhancing text meaning by presenting texts in a visually engaging manner using 2Create a Story, 2Connect and 2Publish.

Students understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They can use algorithms to move objects in programs including 2Go and 2Code and follow instructions to add a photo to Mashcams and 2Publish templates.

Students understand what is meant by an information system and can identify examples that meet communication and recreation needs.

Using Purple Mash, students create and share information with their peers, teachers and the wider school community via individual or class blogs and digital display boards.

Aspect

★ Statement

Digital Technologies Knowledge and Understanding

Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data.

Students access and explore a range of digital systems. They can record voice and add sounds and images into their tasks in Purple Mash (2Animate, 2Connect 2Publish Plus). Students can send and share files using 2Email, 2Blog and digital display boards and they are confident when saving and retrieving their work from folders in Purple Mash.



Recognise different types of data and explore how the same data can be represented in different ways.

Students can create databases in 2Investigate by collating a range of data according to different categories. They can then present data in a variety of creative manners using 2Publish Plus or 2Connect. Students explore code and symbols through investigations of past and present use by Indigenous Australians.

Aspect

★ Statement

Digital Technologies Processes and Production Skills

Collect, access and present different types of data using simple software to create information and solve problems.

Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them.

Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input.

Explain how student solutions and existing information systems meet common personal, school or community needs.

Plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols.



Students demonstrate an ability to organise data using a database such those in 2Investigate and can retrieve specific data for conducting simple online searches. Students can edit more complex digital data such as music compositions within 2Sequence. Students are confident when creating, naming, saving and retrieving content.

Students can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. Debug Challenges: Chimp. Children's program designs display a growing awareness of the need for logical, programmable steps. Students can follow instructions to add a range of media in their digital content including photos, text and sound.

Students plan and design digital and visual programs that include responses to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program and can represent this using branching diagrams in 2Question.

Students have a broad understanding of different existing information systems. They can identify how these systems meet personal, school and community needs.

Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of different technologies, online services and collaborative environments such as 2Connect and 2Write.

Aspect

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Digital Technologies Knowledge and Understanding

Recognise and explore digital systems (hardware and software components) for a purpose

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Students can describe internal and external components of digital systems. They can use external components such as keyboards, microphones and cameras to input data to create digital texts and then save them in their Purple Mash folders, understanding they can access their saved work from any device with their secure login details.

Students understand binary code represents numbers using 0s and 1s and what this denotes in hardware and robotics. They can convert whole numbers to binary code and can apply binary to represent the state of an object as active or inactive in 2Code.

Aspect

★ Statement

Digital Technologies Processes and Production Skills

Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information.

Define problems in terms of data and functional requirements drawing on previously solved problems.

Design a user interface for a digital system.

Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition).

Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input.

Explain how student solutions and existing information systems are sustainable and meet current and future local community needs.

Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols.

Students use digital systems to validate data, for example setting data types in a 2Calculate to make sure an amount is input correctly. They recognise the difference between text, numeric and date formats when using such spreadsheets. Students can use software such as 2Investigate to collect and collate data to visualise trends.

Students can turn a more complex programming task into an algorithm by identifying the important aspects of the task and then decomposing them in a logical way using their knowledge of possible coding structures and applying skills from previous programs. Students test and debug their program as they go and use logical methods to identify and rectify bugs.

Students make clear connections to the audience when designing and creating digital content. They design and create their own blogs to become a content creator on the internet, e.g. 2Blog. Students use criteria to evaluate the quality of digital solutions and can identify improvements, making some refinements.

Students can follow, modify and describe designs of games involving simple algorithms using flowcharts such as 2Chart. They experiment with ways of representing different options using branching diagrams in 2Question. Students explore and experiment with 'IF' and 'REPEAT' statements using flowcharts and branch diagrams.

Students design and create simple computer games that involve decisions and repetitions requiring user input to make selections. They make changes to visual programming language to find solutions to problems for example, taking into consideration size of icons for those who are visually impaired.

Students compare past and present information systems. They apply knowledge of these systems when designing new solutions to address community needs. Students consider environmental and ethical opportunities and consequences when analysing past and present, or designing new, information systems.

Students demonstrate the safe and respectful use of a range of different technologies and online services independently and collaboratively. They identify more discreet inappropriate behaviours through developing critical thinking, e.g. 2Respond activities. They recognise the value in preserving their privacy when online for their own and other people's safety.