BOONDALL STATE SCHOOL DIGITAL TECHNOLOGIES YEAR LEVEL PLAN – YEAR 3 & YEAR 4

Y3 & Y4

DIGITAL TECHNOLOGIES 40 Mins./week

Band Description	**Years 3 and 4** By the end of Year 4, students describe how a range of digital systems (hardware and software) and their peripheral devices can be used for different purposes. They explain how the same data sets can be represented in different ways. Students define simple problems, design and implement digital solutions using algorithms that involve decision-making and user input. They explain how the solutions meet their purposes. They collect and manipulate different data when creating information and digital solutions. They safely use and manage information systems for identified needs using agreed protocols and describe how information systems are used.
Unit Description	**Y3 - C2C Unit 1** **What Digital Systems Do You Use?** Students explore and use a range of digital systems including peripheral devices and create a digital solution (an interactive guessing game) using a visual programming language. They: • identify and explore a range of digital systems and their use to meet needs at home, in school and in the local community, and use a range of peripheral devices to transmit data • define simple problems and identify needs • develop technical skills in using a visual programming language to create a digital solution • describe, follow and apply a sequence of steps and decisions (algorithms) in non-digital contexts and when using a visual programming language • implement a simple digital solution that involves branching algorithms and user input when creating a simple guessing game • explain how their solutions and existing information systems, such as learning software, meet personal, school and community needs • develop skills in computational and systems thinking when solving simple problems and creating solutions.
Assessment	**Student responses to summative assessment tasks contribute to their assessment folio. It provides evidence of their learning and represents their achievements over reporting period. The assessment folio should include a range and balance of assessments to make valid judgments about whether the student has met the achievement standard.** Assessment of student learning will be gathered from a design challenge and project. Students will: • describe how a range of digital systems (hardware and software) and their peripheral devices can be used for different purposes • define simple problems • design and implement digital solutions using algorithms that involve decision-making and user input • explain how the solutions meet their purposes.
Assessment Conventions	**Text – Design Brief and Evaluation Report** **Technique -** **Project:** - a folio capturing the design process undertaken by the student - sequenced instructions - interactive web application - interactive web application for designing a quiz **Test:** - a response to stimulus **Mode** – Hard Copy, digitally and observation checklist **Conditions** – Observation Checklist for response to stimulus Hard Copy for short answer questions and design process to be done independently Digital programming to be independently or in pairs for support of those students not confident with digital skills
Aspect of Achievement Standard	By the end of Year 4, students describe how a range of digital systems (hardware and software) and their peripheral devices can be used for different purposes. They explain how the same data sets can be represented in different ways. Students define simple problems, design and implement digital solutions using algorithms that involve decision-making and user input. They explain how the solutions meet their purposes. They collect and manipulate different data when creating information and digital solutions. They safely use and manage information systems for identified needs using agreed protocols and describe how information systems are used. **Taught** **Assessed**
Unit Description	**Y4 - C2C Unit 1** **What's Your Waste Footprint?** Students explore and manipulate different types of data and transform data into information. They create a digital solution that presents data as meaningful information to address a school/class/community issue. Theyl: • recognise different types of data and represent the same data in different ways • collect, access and present data as information using simple software (such as spreadsheets) • explore and describe how a range of common information systems present data as information to meet personal, school and community needs • develop skills in computational and systems thinking when solving problems and creating solutions • plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols • explain how existing information systems meet personal, school and community needs.

Assessment	**Student responses to summative assessment tasks contribute to their assessment folio. It provides evidence of their learning and represents their achievements over reporting period. The assessment folio should include a range and balance of assessments to make valid judgments about whether the student has met the achievement standard** Assessment of student learning will be gathered from completing a portfolio of work. Students will: • collect and manage data about lunch rubbish, use software to calculate their waste footprint and create an infographic that displays their data • explain how the same data sets can be represented in different ways • collect and manipulate different data when creating information and digital solutions • describe how existing information systems are used for identified needs • safely create and communicate information applying agreed ethical and social protocols.
Assessment Conventions	**Text** – Design Brief and Evaluation Report **Technique** – **Project:** • a folio capturing the design process undertaken by the student • sequenced instructions • interactive web application **Mode** – Hard Copy and Digitally **Conditions** – Hard Copy questions to be independently for evidence of individual understanding Digital activities to be undertaken in groups of 4 as range of data is needed as well as learning with collaborative ways of working
Aspect of Achievement Standard	By the end of Year 4, students describe how a range of digital systems (hardware and software) and their peripheral devices can be used for different purposes. They explain how the same data sets can be represented in different ways. Students define simple problems, design and implement digital solutions using algorithms that involve decision-making and user input. They explain how the solutions meet their purposes. They collect and manipulate different data when creating information and digital solutions. They safely use and manage information systems for identified needs using agreed protocols and describe how information systems are used. **Taught** **Assessed**
Moderation	**Consistency of teacher judgments** Teachers use moderation to support consistency of teacher judgments and comparability of reported results against the relevant achievement standards.

Content Descriptors

Digital Technologies knowledge and understanding	**C2C Unit 1**
Digital Systems	
Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007) Y3	✓
Data Representation	
Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008) Y4	✓
Digital Technologies processes and production skills	**C2C Unit 1**
Collecting, managing and analysing data	
Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009) Y4	✓
Investigating and defining	
Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010) Y3	✓
Producing and implementing	
Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011) Y4	✓
Evaluating	
Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012) Y4	✓
Collaborating and managing	
Plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols (ACTDIP013) Y4	✓