

## Content Descriptions and Outcomes

Knowledge and Understanding Digital Systems			Digital Technology	Digital Systems
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)	Digital systems and peripheral devices are used for different purposes (ACTDIK007)	Digital systems and peripheral devices are used for different purposes and can store and transmit different types of data (ACTDIK007)	Describes how digital systems represent and transmit data (ST2-11DI-T)	Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (VCDTDS019)

  

Representation of Data				Data and Information
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)	Different types of data can be represented in different ways (ACTDIK08)	Data can be represented in different ways (ACTDIK008)		Recognise different types of data and explore how the same data can be represented in different ways (VCDTDI020)

  

Process of Production Skills Collecting, managing and analysing data			Producing and Implementing	Data and Information
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)	Collect and present different types of data using simple software to create useful information (ACTDIP009)	Collect and present different types of data for a specific purpose using software (ACTDIP009)	Collect, access and present data, using software to present and communicate information and solve problems (ACTDIP009)	Collect, access and present different types of data using simple software to create information and solve problems (VCDTDI021)

# 3-4 Australian Digital Technologies Curriculum Mapping Tool



## Creating Digital Solutions by...

Investigating and defining			Design and Production Skills	Creating Digital Solutions
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)	Create a sequence of steps to solve a given task (WATPPS16)	Define a sequence of steps to design a solution for a given task (WATPPS21)  Identify and choose the appropriate resources from a given set (WATPPS22)	Defines problems, describes and follows algorithms to develop solutions (ST2-3DP-T)  Define simple problems by determining and defining a process  Develop a sequence of steps and decisions (algorithms) to solve a problem (ACTDIP010)	Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them (VCDTCD023)

Generating and Designing	Designing		Identifying and Designing	Creating Digital Solutions
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
	Develop and communicate ideas using labelled drawings and appropriate technical terms (WATPPS17)	Develop and communicate design ideas and decisions using annotated drawings and appropriate technical terms (WATPPS23)	Critique needs or opportunities for designing solutions through evaluating products and processes  Define a need or opportunity according to functional and aesthetic criteria  Consider potential resources in defining design needs and opportunities  Investigate and research materials, components, tools and techniques to produce design solutions (ACTDEP014)	

# 3-4 Australian Digital Technologies Curriculum Mapping Tool



Producing and Implementing			Producing and Implementing	Creating Digital Solutions
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)	Select, and safely use, appropriate components with given equipment to make a solution (WATPPS18)	Select, and safely use, appropriate components and equipment to make solutions (WATPPS24)	Generate visual programs using algorithms to create simple digital solutions  Organise and perform strategic roles within a group to solve a problem	Develop simple solutions as visual programs (VCDTCD024)
	<b>Digital Implementation</b> Use visually represented sequenced steps (algorithms), including steps with decisions made by the user (branching) (ACTDIP011)	Use simple visual programming environments that include a sequence of steps (algorithm) involving decisions made by the user (branching) (ACTDIP011)		

Evaluating			Testing and evaluating	Creating Digital Solutions
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012)	Use criteria to evaluate design processes and solutions developed (WATPPS19)	Use criteria to evaluate and justify simple design processes and solutions (WATPPS25)	Selects and uses materials, tools and equipment to develop solutions for a need or opportunity (ST2-2DP-T)  Develop a set of criteria of success with guidance, based on defined needs and opportunities  Develop criteria to evaluate the environmental impact of a design with guidance  Devise a fair process to test a designed solution with guidance	Explain how student-developed solutions and existing information systems meet common personal, school or community needs (VCDTCD025)

# 3-4 Australian Digital Technologies Curriculum Mapping Tool



Evaluating			Testing and evaluating	Creating Digital Solutions
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
			Explain how existing information systems meet personal, school or community needs (ACTDIP012)	

Collaborating and managing				Data and Information
Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
Plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols (ACTDIP013)	Work independently, or collaboratively when required, to plan, create and communicate sequenced steps (WATPPS20)	Work independently, or collaboratively when required, to plan, create and communicate ideas and information for solutions (WATPPS26)		Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols (VCDTDI022)
	<b>Digital Implementation</b>			
	Create and communicate information safely (ACTDIP013)	Create and communicate ideas and information safely (ACTDIP013)		

# 3-4 Australian Digital Technologies Curriculum Mapping Tool



## Achievement Standards

Australian	Western Australian Level 3	Western Australian Level 4	New South Wales Stage 2	Victorian
<p>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.</p>	<p>At Standard, students explore and recognise some differences and the purpose of digital systems and peripheral devices and present data in a variety of ways. Students develop ideas with sequenced steps (algorithms) and branching, using simple software to collect and present data. They work with others to create and communicate ideas and information. In Digital Technologies, students create sequenced steps (algorithms) to solve a given digital task. They develop and communicate ideas using labelled drawings and appropriate technical terms. Students select and safely use appropriate components with given equipment to make a solution. They use criteria to evaluate design processes and solutions developed. Students work independently, or collaboratively, to plan, safely create and communicate sequenced steps.</p>	<p>At Standard, students identify different purposes for digital systems and peripheral devices, recognising they can store and transmit a variety of data. They use simple visual programming, including a sequence of steps(algorithms) and branching, students represent data in a range of ways. They create and communicate ideas and information and use software to collect and represent different types of data, using agreed protocols (netiquette). In Digital Technologies, students use algorithms (sequenced steps) to design a solution for a given digital task. They identify and choose the appropriate resources from a given set. Students develop and communicate design ideas and decisions, using annotated drawings and appropriate technical terms. They select and safely use appropriate components and equipment to make solutions. Students use criteria to evaluate and justify simple design processes and solutions for a given digital task. They work independently, or collaboratively, to plan, safely create and communicate ideas and information for solutions.</p>	<p>By the end of Stage 2, students organise and identify patterns in data and create tables to organise and represent information. Students develop solutions that address specific criteria. They generate and develop ideas, using research to inform their design ideas, which are represented using sketches, brainstorming and where appropriate, digital technologies. Students select materials appropriate for their purposes, with consideration of sustainability and constraints to produce designed solutions. They describe how digital systems transmit data, explore different types of data and how data patterns can be represented and interpreted.</p> <p><b>*Any achievement standards that does not relate directly to Digital Technology has been removed.</b></p>	<p>By the end of Level 4, students describe how a range of digital systems and their peripheral devices can be used for different purposes. Students explain how the same data sets can be represented in different ways. They collect and manipulate different data when creating information and digital solutions. They plan and safely use information systems when creating and communicating ideas and information, applying agreed protocols. Students define simple problems, and design and develop digital solutions using algorithms that involve decision-making and user input. They explain how their developed solutions and existing information systems meet their purposes.</p>