



Curriculum comparison

Preprimary

Western Australian Curriculum	Australian Curriculum
Preprimary	Foundation
Digital systems have common features, including hardware devices and software, and are used at home, in school and in the community	AC9TDIFK01 recognise and explore digital systems (hardware and software) for a purpose
Data can be represented as objects and images	AC9TDIFK02 represent data as objects, pictures and symbols
Some data is personal and owned by them	AC9TDIFP01 identify some data that is personal and owned by them
Steps to take when encountering unexpected inappropriate content, pop-ups, or uninitiated contact	
Follow an algorithm (sequence of steps) to achieve an outcome	
Share ideas to develop a solution	
Explore the purpose for design	
Design solutions through discussion, drawing and/or modelling to meet a personal need	
Use available technologies and materials to safely create a solution	
Use personal preferences to evaluate the solution	

Western Australian Curriculum	Australian Curriculum
Achievement Standards	Achievement Standards
<p>By the end of the year: Children identify and label digital systems (hardware and software), where they are used and their common features. They identify that data can be represented as objects or images. Children follow safety strategies in online encounters. They identify some data is personal and owned by them, and to keep personal data safe is important. Children follow an algorithm (sequence of steps) to achieve an outcome and they begin to understand computational thinking through sequence. In Digital Technologies, children explore needs for design, and develop, create and evaluate designed solutions.</p>	<p>Learning Area Achievement Standard By the end of Foundation students identify familiar products, services and environments and develop familiarity with digital systems, using them for a purpose. They create, communicate and choose design ideas. Students follow steps and use materials and equipment to safely make a designed solution for a school-selected context. They show how to represent data using objects, pictures and symbols and identify examples of data that is owned by them.</p> <p>Subject Achievement Standard By the end of Foundation students show familiarity with digital systems and use them for a purpose. They represent data using objects, pictures and symbols and identify examples of data that is owned by them.</p>

Curriculum comparison

Year 1

Western Australian Curriculum	Australian Curriculum
Year 1	Years 1 and 2
Digital systems have hardware and software that are used together	AC9TDI2K01 identify and explore digital systems and their components for a purpose
Data can be represented as images, symbols, numbers and words	AC9TDI2K02 represent data as pictures, symbols, numbers and words
Some data is personal, owned by them and can be shared with trusted people	AC9TDI2P01 investigate simple problems for known users that can be solved with digital systems
Access their school account, with assistance, using a recorded username and password	AC9TDI2P02 follow and describe algorithms involving a sequence of steps, branching (decisions) and iteration (repetition)
Follow a visual representation of an algorithm (sequence of steps)	AC9TDI2P03 discuss how existing digital systems satisfy identified needs for known users
Share ideas and work with others to develop a solution	AC9TDI2P04 use the basic features of common digital tools to create, locate and communicate content
Explore ideas and design opportunities for a personal need	AC9TDI2P05 use the basic features of common digital tools to share content and collaborate demonstrating agreed behaviours, guided by trusted adults
Design solutions through drawing, modelling and/or a sequence of steps	
Use available technologies and materials to safely create a preferred solution	
Use personal preferences to evaluate the solution for a personal need	



Curriculum comparison

Year 1

Western Australian Curriculum	Australian Curriculum
Achievement Standards	Achievement Standards
<p>By the end of the year: Children identify specific features of digital systems (hardware and software) and how they are used in everyday life. They represent data using pictures, symbols, numbers and words. Children follow strategies to stay safe online, while identifying data is personal and can be shared with trusted people.</p> <p>In Digital Technologies, children explore ideas and design opportunities when designing products or solutions. They follow a visual representation of an algorithm. Children design solutions through drawing, modelling and/or a sequence of steps to plan and produce solutions for a personal need. They use personal preferences to evaluate the solution for a personal need.</p>	<p>Learning area achievement standard By the end of Year 2 students describe the purpose of familiar products, services and environments, including digital systems. They represent and process data in different ways and follow and describe basic algorithms involving a sequence of steps and branching to show how simple digital solutions meet a need for known users. For each of the 2 prescribed technologies contexts they identify the features and uses of technologies and create designed solutions. Students select design ideas based on their personal preferences. They access and use the basic features of common digital tools to create, locate and share content, and collaborate and communicate design ideas using models and drawings. Students safely produce designed or digital solutions and recognise that digital tools may store their personal data online.</p> <p>Subject achievement standard By the end of Year 2 students show how simple digital solutions meet a need for known users. Students represent and process data in different ways. They follow and describe basic algorithms involving a sequence of steps and branching. With assistance, students access and use digital systems for a purpose. They use the basic features of common digital tools to create, locate and share content, and to collaborate, following agreed behaviours. Students recognise that digital tools may store their personal data online.</p>



Curriculum comparison

Year 2

Western Australian Curriculum	Australian Curriculum
Year 2	Years 1 and 2
Digital systems, including hardware devices and software, are used for an identified purpose	AC9TDI2K01 identify and explore digital systems and their components for a purpose
Data can have patterns and may be represented as diagrams, symbols, numbers and words	AC9TDI2K02 represent data as pictures, symbols, numbers and words
Some personal data may be safely shared online with specific people using trusted platforms	AC9TDI2P01 investigate simple problems for known users that can be solved with digital systems
Independently access their school account with a recorded username and password, and log out	AC9TDI2P02 follow and describe algorithms involving a sequence of steps, branching (decisions) and iteration (repetition)
Create an algorithm (sequence of steps) including decisions made by the user	AC9TDI2P03 discuss how existing digital systems satisfy identified needs for known users
Follow algorithms (sequence of steps) including decisions made by the user	AC9TDI2P04 use the basic features of common digital tools to create, locate and communicate content
Plan, share ideas and work with others to develop a solution for a known user	AC9TDI2P05 use the basic features of common digital tools to share content and collaborate demonstrating agreed behaviours, guided by trusted adults
Explore ideas and design opportunities for a known user	
Design solutions generated and communicated through discussion, drawing, modelling and/or a sequence of steps	
Use given equipment and technologies to safely create a solution	
Use personal preferences and the needs of the known user to evaluate the solution	



Curriculum comparison

Year 2

Western Australian Curriculum	Australian Curriculum
Achievement Standards	Achievement Standards
<p>By the end of the year: Children use digital systems for a specific purpose, making connections between software and hardware. They identify patterns within data and recognise data can be represented by diagrams, symbols, numbers and words. Children independently access their school account with a recorded username and password and log out afterwards. Children recognise that websites and apps store personal data, and identify behaviours to stay safe.</p> <p>In Digital Technologies, children explore design opportunities to meet needs. They develop, follow and describe algorithms and decisions made by the user. They use given equipment to safely produce solutions. Children evaluate the success of design ideas and solutions based on the needs of known users.</p>	<p>Learning area achievement standard By the end of Year 2 students describe the purpose of familiar products, services and environments, including digital systems. They represent and process data in different ways and follow and describe basic algorithms involving a sequence of steps and branching to show how simple digital solutions meet a need for known users. For each of the 2 prescribed technologies contexts they identify the features and uses of technologies and create designed solutions. Students select design ideas based on their personal preferences. They access and use the basic features of common digital tools to create, locate and share content, and collaborate and communicate design ideas using models and drawings. Students safely produce designed or digital solutions and recognise that digital tools may store their personal data online.</p> <p>Subject achievement standard By the end of Year 2 students show how simple digital solutions meet a need for known users. Students represent and process data in different ways. They follow and describe basic algorithms involving a sequence of steps and branching. With assistance, students access and use digital systems for a purpose. They use the basic features of common digital tools to create, locate and share content, and to collaborate, following agreed behaviours. Students recognise that digital tools may store their personal data online.</p>



Curriculum comparison

Year 3

Western Australian Curriculum	Australian Curriculum
Year 3	Years 3 and 4
Digital systems and peripheral devices are connected and used together for various purposes	AC9TDI4K01 explore and describe a range of digital systems and their peripherals for a variety of purposes
Data is of different types and can be represented in various ways	AC9TDI4K02 explore transmitting different types of data between digital systems
Different types of personal data are shared and stored online	AC9TDI4K03 recognise different types of data and explore how the same data can be represented differently depending on the purpose
Access their school account, using a unique private memorised password, and logging out afterwards	AC9TDI4P01 define problems with given design criteria and by co-creating user stories
Represent algorithms (sequence of steps), including decisions made by the user (branching) using flowcharts	AC9TDI4P02 follow and describe algorithms involving sequencing, comparison operators (branching) and iteration
Implement algorithms (sequence of steps) in a visual programming environment to include decisions made by the user (branching)	AC9TDI4P03 generate, communicate and compare designs
Communicate ideas and follow a plan with consideration of time management, to develop a solution	AC9TDI4P04 implement simple algorithms as visual programs involving control structures and input
Define ideas and design opportunities for individual and/or local needs	AC9TDI4P05 discuss how existing and student solutions satisfy the design criteria and user stories
Design solutions created with labelled drawings, use of technical terms and/or a sequence of steps	AC9TDI4P06 use the core features of common digital tools to create, locate and communicate content, following agreed conventions
Use appropriate technologies and components with given equipment and follow agreed protocols to produce a designed solution	AC9TDI4P07 use the core features of common digital tools to share content, plan tasks, and collaborate, following agreed behaviours, supported by trusted adults
Use given criteria to evaluate diagrams, technologies and the components used for the designed solution	AC9TDI4P08 access their school account using a memorised password and explain why it should be easy to remember, but hard for others to guess
	AC9TDI4P09 identify what personal data is stored and shared in their online accounts and discuss any associated risks



Curriculum comparison

Year 3

Western Australian Curriculum

Achievement Standards

By the end of the year:

Students explore and recognise peripheral devices and their purpose, and are able to identify data is of different types and can be represented, stored and shared online in different ways.

In Digital Technologies, students create, design and implement algorithms in a visual programming environment to include decisions made by the user to solve a given digital task. They develop and communicate ideas using labelled drawings and technical terms. Students select and safely use appropriate components with given equipment to create a solution. They design and communicate solutions, and follow a plan to produce designed solutions. Students use criteria to evaluate developed design processes and solutions.

Australian Curriculum

Achievement Standards

Learning area achievement standard

By the end of Year 4 students describe how people design products, services and environments to meet the needs of people, including sustainability. They process and represent data for different purposes, follow and describe simple algorithms involving branching and iteration, and implement them as visual programs. For each of the 2 prescribed technologies contexts they describe the features and uses of technologies and create designed solutions. Students select design ideas against design criteria. Students securely access and use digital systems and their peripherals for a range of purposes, including transmitting data. They communicate design ideas using models and drawings including annotations and symbols. Students plan and sequence steps and use technologies and techniques to safely produce designed solutions. They use the core features of common digital tools to plan, create, locate and share content, and to collaborate, following agreed behaviours. Students identify their personal data stored online and its risks.

Subject achievement standard

By the end of Year 4 students create simple digital solutions and use provided design criteria to check if solutions meet user needs. Students process and represent data for different purposes. They follow and describe simple algorithms involving branching and iteration and implement them as visual programs. Students securely access and use digital systems and their peripherals for a range of purposes, including transmitting data. They use the core features of common digital tools to plan, create, locate and share content, and to collaborate, following agreed behaviours. Students identify their personal data stored online and recognise the risks.



Curriculum comparison

Year 4

Western Australian Curriculum	Australian Curriculum
Year 4	Years 3 and 4
Digital systems, including peripheral devices, are used to transfer and store different types of data	AC9TDI4K01 explore and describe a range of digital systems and their peripherals for a variety of purposes
Data of the same type can be represented in different ways depending on the purpose	AC9TDI4K02 explore transmitting different types of data between digital systems
Personal data that is shared and stored online can pose risks	AC9TDI4K03 recognise different types of data and explore how the same data can be represented differently depending on the purpose
Access their school account, using a memorised password. It should be easy to remember but difficult for others to guess. Risks of not logging out	AC9TDI4P01 define problems with given design criteria and by co-creating user stories
Represent an algorithm (sequence of steps) involving decisions (branching) and repetition using flowcharts	AC9TDI4P02 follow and describe algorithms involving sequencing, comparison operators (branching) and iteration
Implement algorithms (sequence of steps) in a visual programming environment to include decisions (branching) and repetition	AC9TDI4P03 generate, communicate and compare designs
Use agreed protocols and management roles to communicate ideas, plan and make decisions, to develop solutions	AC9TDI4P04 implement simple algorithms as visual programs involving control structures and input
Define the features of a design brief and the requirements of a design task for a community need	AC9TDI4P05 discuss how existing and student solutions satisfy the design criteria and user stories
Investigate and select resources based on properties for the given task	AC9TDI4P06 use the core features of common digital tools to create, locate and communicate content, following agreed conventions
Design solutions through use of labelled drawings, technical terms, decision-making and/or a sequence of steps	AC9TDI4P07 use the core features of common digital tools to share content, plan tasks, and collaborate, following agreed behaviours, supported by trusted adults
Use appropriate technologies, components and/or equipment and follow agreed protocols to produce a designed solution	AC9TDI4P08 access their school account using a memorised password and explain why it should be easy to remember, but hard for others to guess
Use given criteria to evaluate design features, selected resources, decision-making processes and the designed solution	AC9TDI4P09 identify what personal data is stored and shared in their online accounts and discuss any associated risks



Curriculum comparison

Year 4

Western Australian Curriculum

Achievement standards

By the end of the year:

Students identify different purposes for digital systems, hardware components and peripheral devices. They identify how data can be represented in a range of ways. Students design and implement algorithms in a visual programming environment that involve decisions and repetition. They create and communicate ideas and information. Students use software to collect and represent different types of data, using agreed protocols. They identify their personal data that is shared and stored online can pose risks.

In Digital Technologies, students develop and communicate design ideas and decisions, using labelled drawings and technical terms. Students use agreed protocols and management roles to plan, make decisions and communicate ideas to develop solutions. They use given criteria to evaluate design features, selected resources, decision making process and the designed solution for a given digital task.

Australian Curriculum

Achievement Standards

Learning area achievement standard

By the end of Year 4 students describe how people design products, services and environments to meet the needs of people, including sustainability. They process and represent data for different purposes, follow and describe simple algorithms involving branching and iteration, and implement them as visual programs. For each of the 2 prescribed technologies contexts they describe the features and uses of technologies and create designed solutions. Students select design ideas against design criteria. Students securely access and use digital systems and their peripherals for a range of purposes, including transmitting data. They communicate design ideas using models and drawings including annotations and symbols. Students plan and sequence steps and use technologies and techniques to safely produce designed solutions. They use the core features of common digital tools to plan, create, locate and share content, and to collaborate, following agreed behaviours. Students identify their personal data stored online and its risks.

Subject achievement standard

By the end of Year 4 students create simple digital solutions and use provided design criteria to check if solutions meet user needs. Students process and represent data for different purposes. They follow and describe simple algorithms involving branching and iteration and implement them as visual programs. Students securely access and use digital systems and their peripherals for a range of purposes, including transmitting data. They use the core features of common digital tools to plan, create, locate and share content, and to collaborate, following agreed behaviours. Students identify their personal data stored online and recognise the risks.



Curriculum comparison

Year 5

Western Australian Curriculum	Australian Curriculum
Year 5	Years 5 and 6
Digital systems have main internal components that perform particular functions to achieve a purpose	AC9TDI6K01 investigate the main internal components of common digital systems and their function
Data of all types, including text, numeric, sound and images, are represented using codes	AC9TDI6K02 examine how digital systems form networks to transmit data
Personal data can be used to create a permanent digital footprint	AC9TDI6K03 explain how digital systems represent all data using numbers
Access multiple personal accounts using unique passphrases or biometrics. Risks of password reuse and not logging out	AC9TDI6K04 explore how data can be represented by off and on states (zeros and ones in binary)
Design algorithms in plain English and/or flowcharts that involve user input, variables and control structures (sequence, decisions and repetition)	AC9TDI6P01 define problems with given or co-developed design criteria and by creating user stories
Implement algorithms in a visual programming environment involving variables and control structures (sequence, decisions and repetition) with user input	AC9TDI6P02 design algorithms involving multiple alternatives (branching) and iteration
Use agreed protocols and management roles to communicate decisions, plan and manage time, to develop designed solutions	AC9TDI6P03 design a user interface for a digital system
Break down a design brief to define the purpose and requirements for a given task	AC9TDI6P04 generate, modify, communicate and evaluate designs
Investigate and select resources based on properties and functions for the given task	AC9TDI6P05 implement algorithms as visual programs involving control structures, variables and input
Design solutions considering competing factors, with annotated diagrams, storyboards and/or a sequence of steps, using technical terms and an iterative process	AC9TDI6P06 evaluate existing and student solutions against the design criteria and user stories and their broader community impact
Use technologies, components and/or equipment to implement agreed protocols to produce a designed solution	AC9TDI6P07 select and use appropriate digital tools effectively to create, locate and communicate content, applying common conventions
Use given criteria to evaluate design features, consideration of competing factors, processes and the designed solution	AC9TDI6P08 select and use appropriate digital tools effectively to share content online, plan tasks and collaborate on projects, demonstrating agreed behaviours
	AC9TDI6P09 access multiple personal accounts using unique passphrases and explain the risks of password re-use
	AC9TDI6P10 explain the creation and permanence of their digital footprint and consider privacy then collecting user data



Curriculum comparison

Year 5

Western Australian Curriculum	Australian Curriculum
Achievement Standards	Achievement Standards
<p>By the end of the year: Students identify internal components of digital systems and their functions. They identify ways data is represented using code, and provide relevant examples. Students create design solutions, follow and represent diagrammatically algorithms involving user input, variables and control structures, such as sequencing, decisions and repetition. They implement algorithms using visual programming languages. Students identify and make judgements based on the use of personal data and how it contributes to a permanent digital footprint.</p> <p>In Digital Technologies, students define a problem, identify available resources and develop designed solutions. They develop and communicate alternative solutions, and use annotated diagrams, storyboards and appropriate technical terms for design ideas. They access multiple personal accounts using unique passphrases or biometrics and describe the risks of password re-use and not logging out.</p>	<p>Learning area achievement standard By the end of Year 6 students explain how people design products, services and environments to meet the needs of communities, including sustainability. For each of the 3 prescribed technologies contexts students explain how the features of technologies impact on design decisions and they create designed solutions. They process data and show how digital systems represent data, design algorithms involving complex branching and iteration, and implement them as visual programs including variables. They select and justify design ideas and solutions against design criteria. Students share and communicate ideas or content to an audience using technical terms, graphical representation techniques and appropriate digital tools. They develop project plans, including production processes, and select technologies and techniques to safely produce designed or digital solutions. Students securely access and use multiple digital systems and describe their components and how they interact to process and transmit data. They identify their digital footprint and recognise its permanence.</p> <p>Subject achievement standard By the end of Year 6 students develop and modify digital solutions, and define problems and evaluate solutions using user stories and design criteria. They process data and show how digital systems represent data. Students design algorithms involving complex branching and iteration and implement them as visual programs including variables. They securely access and use multiple digital systems and describe their components and how they interact to process and transmit data. Students select and use appropriate digital tools effectively to plan, create, locate and share content, and to collaborate, applying agreed conventions and behaviours. They identify their digital footprint and recognise its permanence.</p>



Curriculum comparison

Year 6

Western Australian Curriculum	Australian Curriculum
Year 6	Years 5 and 6
Digital systems are connected in wired and wireless networks to transmit data for a variety of purposes	AC9TDI6K01 investigate the main internal components of common digital systems and their function
Data can be represented by on and off states (zeros and ones in binary)	AC9TDI6K02 examine how digital systems form networks to transmit data
Digital footprint and privacy considerations when collecting user data	AC9TDI6K03 explain how digital systems represent all data using numbers
Access multiple personal accounts using unique passphrases or biometrics. Risks of password reuse and practices to reduce risk to their personal accounts	AC9TDI6K04 explore how data can be represented by off and on states (zeros and ones in binary)
Design algorithms in plain English and/or flowcharts that involve user input, variables and control structures (sequence, decisions and various types of iteration: For, Repeat, While)	AC9TDI6P01 define problems with given or co-developed design criteria and by creating user stories
Implement algorithms in a visual programming environment involving variables and control structures (sequence, decisions, input and various types of iteration)	AC9TDI6P02 design algorithms involving multiple alternatives (branching) and iteration
Use agreed protocols to set goals, manage competing factors, resources and time, to plan, develop and communicate decisions, when developing designed solutions for a given task	AC9TDI6P03 design a user interface for a digital system
Break down a design brief to define the purpose, requirements and constraints for a given task	AC9TDI6P04 generate, modify, communicate and evaluate designs
Investigate and select resources considering constraints, properties and functions appropriate for the given task	AC9TDI6P05 implement algorithms as visual programs involving control structures, variables and input
Design alternative solutions achieved through an iterative process, including critical thinking, graphical representations, use of a range of technologies, techniques, technical terms and/or a sequence of steps	AC9TDI6P06 evaluate existing and student solutions against the design criteria and user stories and their broader community impact
Use a range of technologies, components and/or equipment to implement agreed protocols to produce a designed solution	AC9TDI6P07 select and use appropriate digital tools effectively to create, locate and communicate content, applying common conventions
Develop negotiated criteria to evaluate design features, graphics, selected technologies, processes and functionality, with consideration of constraints for the designed solution	AC9TDI6P08 select and use appropriate digital tools effectively to share content online, plan tasks and collaborate on projects, demonstrating agreed behaviours
	AC9TDI6P09 access multiple personal accounts using unique passphrases and explain the risks of password re-use
	AC9TDI6P10 explain the creation and permanence of their digital footprint and consider privacy then collecting user data



Curriculum comparison

Year 6

Western Australian Curriculum	Australian Curriculum
Achievement Standards	Achievement Standards
<p>By the end of the year: Students outline interactions between wired and wireless networks to transmit data for a variety of purposes. They explain how data can be represented by off and on states (zeros and ones in binary) and make simple conversions. Students use visual programming environments to design, modify and implement algorithms that involve user input, variables and control structures such as sequence, decisions and various types of iteration. They identify their digital footprint and privacy considerations when collecting user data.</p> <p>In Digital Technologies, students identify available resources to design a solution for a given digital task, using critical thinking strategies to make decisions. They develop, design and compare alternative solutions that are achieved through an iterative process including graphical representations, use of a range of technologies, techniques, technical terms and/or a sequence of steps. They use agreed protocols to set goals, manage competing factors, resources and time, to plan, develop, communicate ideas and solutions for a given task.</p>	<p>Learning area achievement standard By the end of Year 6 students explain how people design products, services and environments to meet the needs of communities, including sustainability. For each of the 3 prescribed technologies contexts students explain how the features of technologies impact on design decisions and they create designed solutions. They process data and show how digital systems represent data, design algorithms involving complex branching and iteration, and implement them as visual programs including variables. They select and justify design ideas and solutions against design criteria. Students share and communicate ideas or content to an audience using technical terms, graphical representation techniques and appropriate digital tools. They develop project plans, including production processes, and select technologies and techniques to safely produce designed or digital solutions. Students securely access and use multiple digital systems and describe their components and how they interact to process and transmit data. They identify their digital footprint and recognise its permanence.</p> <p>Subject achievement standard By the end of Year 6 students develop and modify digital solutions, and define problems and evaluate solutions using user stories and design criteria. They process data and show how digital systems represent data. Students design algorithms involving complex branching and iteration and implement them as visual programs including variables. They securely access and use multiple digital systems and describe their components and how they interact to process and transmit data. Students select and use appropriate digital tools effectively to plan, create, locate and share content, and to collaborate, applying agreed conventions and behaviours. They identify their digital footprint and recognise its permanence.</p>