(no-code)

investigate how and manage, control and secure access to in

•

Elaborations

• explaining how the operating system hides the complexity of different from applications, for example applications can treat from a mouse and touch screen in the same way

• exploring how public key cryptography, for example TLS, and hashing, such as SHA-1, secure the storage and transmission of

• configuring a simple network using real or simulated and observing packets moving around the network, for example monitoring packets on simulated switches and networked■devices

• explaining how domain names and IP addresses allow to be transmitted to specific networked devices, for example DNS and routing tables

• describing elements of access control and explaining why they are necessary, for example authentication and permissions for restricting access to install to administrators

Students learn to:

investigate how hardware and software manage, control and secure access to data systems

(AC9TDI10K01)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Managing and operating

• Select and operate tools

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Managing and operating

• Select and operate tools

Managing and operating

• Select and operate tools

Managing and operating

• Select and operate tools

Managing and operating

• Select and operate tools

Managing and operating

• Select and operate tools

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9M10SP02

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks

• troubleshoot common problems and automate repetitive tasks

• select and operate advanced and emerging digital tools confidently

• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

AC9TDI10K02

online as content (text), structure ( ) and presentation ( ) and explain why such representations are important

•

Elaborations

• representing documents by separating the content (the text in the document), the structure (the document structure such as headings and paragraphs) and presentation (how the document is laid out and styled)

• writing web pages using HyperText Markup Language (HTML) for the content and structure and Cascading Style Sheets (CSS) for the page and explaining how HTML tags separate content from structure

• explaining how representing content, structure and presentation separately allows each of them to be designed, edited, manipulated and stored independently of the others and why this is■important

Students learn to:

represent documents online as content (text), structure (markup) and presentation (explain why such representations are important

(AC9TDI10K02)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Creating and exchanging

• Create, communicate and collaborate

Managing and operating

• Select and operate tools

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Creating and exchanging

• Create, communicate and collaborate

Managing and operating

• Select and operate tools

Creating and exchanging

• Create, communicate and collaborate

Managing and operating

• Select and operate tools

Creating and exchanging

• Create, communicate and collaborate

Managing and operating

• Select and operate tools

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10K02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

AC9TDI10K03

investigate simple techniques

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Elaborations

• using an to identify patterns in and represent them in a compressed way, for example repeated pixels in an image with run-length encoding
• exploring the difference between lossy and lossless compression and the consequences of each, for example exploring codecs for audiovisual compression such as MP3, MP4 and WAV formats, considering energy requirements of file sizes
• examining an image and discussing whether the image quality would be compromised if all the blue pixels of the sky in one row were to be replaced by one token and the number of pixels it■represents

Students learn to:

investigate simple data compression techniques

(AC9TDI10K03)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Managing and operating

• Manage content

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Managing and operating

• Manage content

Managing and operating

• Manage content

Managing and operating

• Manage content

Snapshot – Manage content

Digital Literacy: Managing and operating: Manage content

Content description

AC9TDI10K03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- store and backup content online for access and editing from multiple devices
- store content systematically online for access and editing (with version history) from multiple devices and ensure data is reliably backed up

Snapshot – Manage content

Digital Literacy: Managing and operating: Manage content

Content description

AC9TDI10K03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
- store and backup content online for access and editing from multiple devices
- store content systematically online for access and editing (with version history) from multiple devices and ensure data is reliably backed up

AC9TDI10P01

develop techniques to , store and validate from a range of sources using , including spreadsheets and databases

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-

Elaborations

• developing systems that store , for example a movie or travel review website that collects Likert scale ratings and written reviews
• developing systems that check is correct and meaningful using automated techniques and manual analysis, for example, validating movie review using rules and elements, and detecting bias and fake reviews through simple statistical analysis
• developing systems that , use and protect according to the Australian Privacy Principles, for example ensuring personally identifiable information is not publicly shared without consent and is protected from unauthorised access
• accessing and storing from the Australian Bureau of Statistics in a format that is useful for analysis, for example acquiring on the population growth across age groups in Australia
• identifying strengths and weaknesses of collecting using different methods, for example online surveys, face-to-face interviews, phone interviews, observation, comments in response to a social media posting, phone logs, browser history and online webcam systems
• considering how training issues such as the zero problem dictate the output from predictive ; for example, a with many examples of horses and no zebras in its training is likely to classify all zebras as horses
Students learn to:

develop techniques to acquire, store and validate data from a range of sources usin including spreadsheets and databases

(AC9TDI10P01)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Investigating

• Acquire and collate data

• Interpret data

Managing and operating

• Manage content

Statistics and probability

• Interpreting and representing data

• Interpreting and representing data

• Interpreting and representing data

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Creating and exchanging

• Create, communicate and collaborate

Investigating

• Locate information

Statistics and probability

• Interpreting and representing data

Investigating

• Interpret data

Statistics and probability

• Interpreting and representing data

Investigating

• Interpret data

Managing and operating

• Protect content

Investigating

• Interpret data

Managing and operating

• Manage content

• Protect content

Statistics and probability

• Interpreting and representing data

Investigating

• Interpret data

Statistics and probability

• Interpreting and representing data

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9HC9S02

AC9HC10S02

AC9HE9S02

AC9HE10S02

AC9HG9S02

AC9HG10S02

AC9M9ST01

AC9M9ST02

AC9M9ST05

AC9M10ST01

Snapshot – Acquire and collate data

Digital Literacy: Investigating: Acquire and collate data

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• collect and access data from a range of sources, using specialised digital tools in response to problems, and evaluate it for relevance

• collect and evaluate quantitative and qualitative data using specialised digital tools and processes in the context of identified problems

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions

• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Manage content

Digital Literacy: Managing and operating: Manage content

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• store and backup content online for access and editing from multiple devices

• store content systematically online for access and editing (with version history) from multiple devices and ensure data is reliably backed up

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Collecting, displaying, interpreting and analysing numerical data

• poses questions based on variations in continuous numerical data and chooses the appropriate method to collect and record data (e.g. collects information on the heights of buildings or daily temperatures, tabulates the results and represents these graphically; uses a survey to collect primary data or secondary data extracted from census data)

• uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning (e.g. "I can't use a frequency histogram for categorical data because there is no numerical connection between the categories"; converts their data to percentages in order to compare the girls' results to those of the boys, as the total number of boys and girls who participated in the survey was different)

• determines and calculates the most appropriate statistic to describe the spread of data (e.g. when creating an infographic, uses the mean of the data to describe household income and the median of the data for house prices)

• calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution (e.g. describes the mean kilojoule intake and median hours of

exercise of a sample population when investigating community health and wellbeing; describes central tendency when analysing road safety statistics)

• compares the usefulness of different representations of the same data (e.g. chooses to use a line graph to illustrate trends, a bar graph to compare the living standards of different economies and a histogram to show income distribution)

• describes the spread of a data distribution in terms of the range, clusters, skewness and symmetry of the graphical display, and determines and makes connections to the mode, median and mean of the data

Interpreting graphical representations

• uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)

• summarises data using fractions, percentages and decimals (e.g. 2 3 \frac23 3 2 ■ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)

• explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)

• interprets graphs depicting motion such as distance–time and velocity–time graphs

• interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease

• investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)

• investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)

• interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

• considers the context when determining whether to use data from a sample or a population

• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)

• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)

• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Interpreting graphical representations

• uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)

• summarises data using fractions, percentages and decimals (e.g. 2 3 \frac23 3 2 ■ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)

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• interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

• considers the context when determining whether to use data from a sample or a population

• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)

• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)

• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

• applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)

• identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)

• justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Sampling

• considers the context when determining whether to use data from a sample or a population

• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)

• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)

• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

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• justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Locate information

Digital Literacy: Investigating: Locate information

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• locate, select and retrieve relevant information from multiple sources, exploring advanced search functions and targeted criteria

• locate relevant information by applying advanced search functions across multiple sources involving purposefully selected and contextually specific terms and criteria

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Collecting, displaying and interpreting numerical data

• collects and records discrete numerical data using an appropriate method for recording (e.g. uses a frequency table to record the experimental results for rolling a dice; records sample measurements taken during a science investigation)

• constructs graphical representations of numerical data and explains the difference between continuous and discrete data (e.g. explains that measurements such as length, mass and temperature are continuous data whereas a count such as the number of people in a queue is discrete)

• explains how data displays can be misleading (e.g. whether a scale should start at zero; not using uniform intervals on the axes)

• interprets visual representations of data displayed using a multi-unit scale, reading values between the marked units and describing any variation and trends in the data

Collecting, displaying, interpreting and analysing numerical data

• poses questions based on variations in continuous numerical data and chooses the appropriate method to collect and record data (e.g. collects information on the heights of buildings or daily

temperatures, tabulates the results and represents these graphically; uses a survey to collect primary data or secondary data extracted from census data)
• uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning (e.g. "I can't use a frequency histogram for categorical data because there is no numerical connection between the categories"; converts their data to percentages in order to compare the girls' results to those of the boys, as the total number of boys and girls who participated in the survey was different)
• determines and calculates the most appropriate statistic to describe the spread of data (e.g. when creating an infographic, uses the mean of the data to describe household income and the median of the data for house prices)
• calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution (e.g. describes the mean kilojoule intake and median hours of exercise of a sample population when investigating community health and wellbeing; describes central tendency when analysing road safety statistics)
• compares the usefulness of different representations of the same data (e.g. chooses to use a line graph to illustrate trends, a bar graph to compare the living standards of different economies and a histogram to show income distribution)
• describes the spread of a data distribution in terms of the range, clusters, skewness and symmetry of the graphical display, and determines and makes connections to the mode, median and mean of the data

Interpreting graphical representations

• uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
• summarises data using fractions, percentages and decimals (e.g. $\frac{2}{3}$ ■ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
• explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
• interprets graphs depicting motion such as distance–time and velocity–time graphs
• interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
• investigates the association of 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
• investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
• interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Sampling

• considers the context when determining whether to use data from a sample or a population
• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

• applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)
• identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)
• justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Protect content

Digital Literacy: Managing and operating: Protect content

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• protect content when sharing by selecting appropriate access controls for individuals and shared links for wider groups
• protect content when sharing by purposefully selecting appropriate access controls for individuals and groups

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Manage content

Digital Literacy: Managing and operating: Manage content

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• store and backup content online for access and editing from multiple devices
• store content systematically online for access and editing (with version history) from multiple devices and ensure data is reliably backed up

Snapshot – Protect content

Digital Literacy: Managing and operating: Protect content

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• protect content when sharing by selecting appropriate access controls for individuals and shared links for wider groups
• protect content when sharing by purposefully selecting appropriate access controls for individuals and groups

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Interpreting graphical representations

• uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
• summarises data using fractions, percentages and decimals (e.g. 2 3 \frac23 3 2 ■ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
• explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
• interprets graphs depicting motion such as distance–time and velocity–time graphs
• interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease
• investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
• investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
• interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set

such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

• considers the context when determining whether to use data from a sample or a population
• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

• applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)
• identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)
• justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P01

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P01

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Interpreting graphical representations

• uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)
• summarises data using fractions, percentages and decimals (e.g. 2 3 \frac23 3 2 ■ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)
• explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)
• interprets graphs depicting motion such as distance–time and velocity–time graphs
• interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of

disease
- investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)
- investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)
- interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

- considers the context when determining whether to use data from a sample or a population
- determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)
- makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)
- plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

- applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)
- identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)
- justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

AC9TDI10P02

analyse and interactively using a range of , including spreadsheets and databases, to draw conclusions and make predictions by identifying trends and

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Elaborations

- summarising , its and the relationships between sets, identifying trends and to draw conclusions and make predictions, for example summarising about electorates and their demographics, historical swings and exceptions to predict an election■outcome
- developing interactive visualisations for exploring complex , for example population, life expectancy and fertility rate in motion charts
- using to visualise and compare to identify patterns, relationships and trends, for example investigating emerging trends in Australia's industries
- exploring machine learning, a form of artificial intelligence where an is trained using a set, for example to classify images into categories
- adjusting parameters of an AI to observe the impact of different factors on predicted outcomes; for example, changing the weighting of different to see how much it changes the 's outputs

Students learn to:

analyse and visualise data interactively using a range of software, including spread

databases, to draw conclusions and make predictions by identifying trends and out

(AC9TDI10P02)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Investigating

• Interpret data

Statistics and probability

• Interpreting and representing data

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Investigating

• Interpret data

Statistics and probability

• Interpreting and representing data

Investigating

• Interpret data

Investigating

• Interpret data

Investigating

• Interpret data

Related content

This content description can be taught with the following content descriptions from other learning areas.
AC9HE9S03
AC9HE10S03
AC9HG9S03
AC9HG10S03
AC9M9M01
AC9M9P03
AC9M9ST04
AC9M9ST05
AC9M10A05
AC9M10ST02
AC9M10ST03
AC9M10ST04
AC9M10ST05

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions

• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P02

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Sampling

• considers the context when determining whether to use data from a sample or a population

• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)

• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)

• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Recognising bias

• applies an understanding of distributions to evaluate claims based on data (e.g. recognises that the accuracy of using a sample for predicting population values depends on both the relative size of the sample and how well the characteristics of the sample reflect the characteristics of the population; critically analyses statistics that reinforce stereotypes; evaluates claims made by the media regarding young people in relation to drugs and/or risk-taking behaviours)

• identifies and explains bias as a possible source of error in media reports of survey data (e.g. uses data to evaluate veracity of review headlines such as "everybody's favourite game"; investigates media claims on attitudes to government responses to market failure or income redistribution)

• justifies criticisms of data sources that include biased statistical elements (e.g. inappropriate sampling from populations; identifying sources of uncertainty in a scientific investigation; checks the authenticity of a data set)

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions

• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpreting and representing data

Numeracy: Statistics and probability: Interpreting and representing data

Content description

AC9TDI10P02

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Collecting, displaying, interpreting and analysing numerical data

• poses questions based on variations in continuous numerical data and chooses the appropriate method to collect and record data (e.g. collects information on the heights of buildings or daily temperatures, tabulates the results and represents these graphically; uses a survey to collect primary data or secondary data extracted from census data)

• uses numerical and graphical representations relevant to the purpose of the collection of the data and explains their reasoning (e.g. "I can't use a frequency histogram for categorical data because there is no numerical connection between the categories"; converts their data to percentages in order to compare the girls' results to those of the boys, as the total number of boys and girls who participated in the survey was different)

• determines and calculates the most appropriate statistic to describe the spread of data (e.g. when creating an infographic, uses the mean of the data to describe household income and the median of the data for house prices)

• calculates simple descriptive statistics such as mode, mean or median as measures to represent typical values of a distribution (e.g. describes the mean kilojoule intake and median hours of exercise of a sample population when investigating community health and wellbeing; describes central tendency when analysing road safety statistics)

• compares the usefulness of different representations of the same data (e.g. chooses to use a line

graph to illustrate trends, a bar graph to compare the living standards of different economies and a histogram to show income distribution)

• describes the spread of a data distribution in terms of the range, clusters, skewness and symmetry of the graphical display, and determines and makes connections to the mode, median and mean of the data

Interpreting graphical representations

• uses features of graphical representations to make predictions (e.g. predicts audience numbers based on historical data; interprets a range of graphs to identify possible trends and make predictions such as economic growth, stock prices, interest rates, population growth)

• summarises data using fractions, percentages and decimals (e.g. 2 3 \frac23 3 2 ■ of a class live in the same suburb; represents road safety and sun safety statistics as a percentage of the Australian population)

• explains that continuous variables depicting growth or change often vary over time (e.g. creates growth charts to illustrate impacts of financial decisions; describes patterns in inflation rates, employment rates, migration rates over time; represents changes to fitness levels following the implementation of a personal fitness plan; interprets temperature charts)

• interprets graphs depicting motion such as distance–time and velocity–time graphs

• interprets and describes patterns in graphical representations of data from real-life situations such as the motion of a rollercoaster, flight trajectory of a basketball shot and the spread of disease

• investigates the association of 2 2 2 numerical variables through the representation and interpretation of bivariate data (e.g. uses scatter plots to represent bivariate data when investigating the relationship between 2 2 2 variables, such as income per capita, population density and life expectancy for different socio-economic groups)

• investigates, represents and interprets time series data (e.g. interrogates a time series graph showing the change in costs over time; uses a maximum daily temperature chart to determine the average temperature for the month)

• interprets the impact of changes to data (e.g. recognises the impact of outliers on a data set such as the income of a world-class professional athlete on the average income of players at the state/territory level; uses digital tools to enhance the quality of data in a science investigation)

Sampling

• considers the context when determining whether to use data from a sample or a population

• determines what type of sample to use from a population (e.g. decides to use a representative sample when conducting targeted market research or when researching beliefs about a health-related issue)

• makes reasonable statements about a population based on evidence from samples (e.g. considers accuracy of representation of marginalised individuals or population groups)

• plans, executes and reports on sampling-based investigations, taking into account validity of methodology and consistency of data, to answer questions formulated by the student

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions

• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P02

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

AC9TDI10P03

and using

•

Elaborations

• entities and processes, their and the relationships between them, for example creating database tables for a movie, a user and their movie review, where a movie has a title, genre and release date, and a review has a movie, a user and their rating and■comments
• using to help in decision-making, for example creating a schema for a and building the database, incorporating and reporting functionality to solve a problem of student choice
• interpreting and querying multi-table databases using SQL with SELECT, WHERE and simple JOIN/GROUP BY clauses and counting, for example checking that each user has only reviewed each movie once
Students learn to:

model and query entities and their relationships using structured data

(AC9TDI10P03)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Investigating

• Interpret data

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Investigating

• Interpret data

Investigating

• Interpret data

Investigating

• Interpret data

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpret data

Digital Literacy: Investigating: Interpret data

Content description

AC9TDI10P03

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse and visualise data by selecting and using a range of digital tools to infer relationships and make predictions
• analyse and visualise multidimensional data by selecting and using a range of interactive tools to draw conclusions and make predictions

Snapshot – Interpret data

AC9TDI10P04

define and with and by interviewing stakeholders to create

•

•

Elaborations

• creating by interviewing a stakeholder to complete a template such as "As a , I want so that ", for example interviewing an amateur athlete to complete the template, such as "As an athlete, I want to ensure my energy intake is high enough to complete a half marathon."
• defining the problem with precision and some awareness of scope, for example "How do we encourage people to balance their energy intake and expenditure?" and "Can this be solved in a specified timeframe?"
• asking questions that help them define the problem more precisely, for example "How do we measure energy intake?" or "How much energy does each exercise expend?"
• recognising the importance of diverse perspectives when defining the problem and devising survey or interview questions to elicit stakeholder needs, for example "What types of exercise count?" and allowing open-ended responses to the exercise they do
• exploring how First Nations Australian cultural stories and languages are being preserved with , for example how communities could record, animate and maintain their connections with culture and language in a contemporary format that resonates with young people to help ensure that vital practices continue

Students learn to:

define and decompose real-world problems with design criteria and by interviewing create user stories

(AC9TDI10P04)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

• Evaluate actions and outcomes

Writing

• Creating texts

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Analysing

• Evaluate actions and outcomes

Creating and exchanging

• Plan

Analysing

• Evaluate actions and outcomes

Analysing

• Evaluate actions and outcomes

Analysing

• Evaluate actions and outcomes

Creating and exchanging

• Plan

Culture

• First Nations Australian societies are diverse and have distinct cultural expressions such as language, customs and beliefs. As First Nations Peoples of Australia, they have the right to maintain, control, protect and develop their cultural expressions, while also maintaining the right to control, protect and develop culture as Indigenous Cultural and Intellectual Property.

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions

• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Creating texts

Literacy: Writing: Creating texts

Content description

AC9TDI10P04

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Crafting ideas

• creates informative texts that describe, explain and document (e.g. describe an artwork, document the materials and explain why it was created)

• selects structural elements to comprehensively and accurately represent the information (e.g. a fact sheet includes an opening statement, labelled diagrams and text boxes)

• orients the reader to the topic or concept using a definition or classification
• develops ideas with details and examples
• uses ideas derived from research
• uses written and visual supporting evidence

Text forms and features

• uses cohesive devices to link concepts across texts (e.g. uses lexical cohesion such as word associations and synonyms)
• uses cohesive devices to express cause and effect (e.g. uses text connectives such as "therefore", "subsequently")
• includes salient visual and audio features to expand on written information (e.g. creates graphs and other technical diagrams from authentic data)
• uses language to compare (e.g. "alternatively", "whereas")
• uses formatting appropriately to reference and label graphics

Vocabulary

• uses a range of learnt, technical and discipline-specific terms (e.g. "adapt", "survive")
• uses more sophisticated words to express cause and effect (e.g. "therefore", "subsequently")

Crafting ideas

• creates informative texts to explain and analyse (e.g. analyses how artists use visual conventions in artworks)
• creates texts to compare and contrast phenomena (e.g. identify the similarities and differences between species of animals)
• orients the reader clearly to the topic or concept (e.g. using a definition or classification in the opening paragraph)
• intentionally selects structural elements for effect (e.g. includes an effective conclusion that synthesises complex ideas)
• uses evidence and research including digital resources to expand upon information and elaborate concepts

Text forms and features

• varies sentence structure for effect (see Grammar)
• judiciously uses language, visual and audio features to emotionally or intellectually affect the reader
• uses more elaborate noun groups/phrases that include classifying adjectives and specific nouns (e.g. "mineral component of sedimentary rocks")
• creates cohesive flow by condensing previous information into a summarising noun (e.g. "A series of tumultuous events culminated in the outbreak of WWI - modern history's turning point.")
• uses passive voice and nominalisation to write succinctly (e.g. "the results were analysed") (see Grammar)

Vocabulary

• uses discipline-specific terminology to provide accurate and explicit information (e.g. "discipline metalanguage")
• uses a range of synonyms for frequently occurring words, in a longer text (e.g. "repair", "fix", "remedy")
• uses vocabulary to indicate and describe relationships (e.g. "additionally", "similarly")

Crafting ideas

• creates sustained, informative texts that precisely explain, analyse and evaluate concepts or abstract entities
• uses structural features flexibly to organise ideas strategically (e.g. includes a defined, cogent conclusion or summation)
• creates texts with forms and features combined strategically for purpose (e.g. describes a historical event from the perspective of a secondary source)
• uses evidence and references
• creates succinct short-answer explanatory texts as well as complex, multi-staged extended texts

Text forms and features

• maintains tone appropriate to the audience
• uses extended noun groups/phrases including adjectival phrases (e.g. "a sturdy construction with modern design features") (see Grammar)

Vocabulary
• uses complex abstractions (e.g. "economic", "sociocultural")

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P04

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• evaluate the effectiveness of a course of action or the outcome of a task and account for expected

and unexpected results, including using a given or co-developed set of criteria to support decisions
• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P04
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Resource – WS01 - Digital project: Python game development

By the end of Year 10 students develop and modify innovative digital solutions, decompose real-world problems, and critically evaluate alternative solutions against stakeholder elicited user stories.■Students acquire, interpret and model complex data with databases and represent documents as content, structure and presentation. They design and validate algorithms and implement them, including in an object-oriented programming language. Students explain how digital systems manage, control and secure access to data; and model cyber security threats and explore a vulnerability. They use advanced features of digital tools to create interactive content, and to plan, collaborate on, and manage agile projects. Students apply privacy principles to manage digital footprints.

AC9TDI10P07

design and prototype the user experience of a digital system
AC9TDI10P09

implement, modify and debug modular programs, applying selected algorithms and data structures, including in an object-oriented programming language
AC9TDI10P11

select and use emerging digital tools and advanced features to create and communicate interactive content for a diverse audience
AC9TDI10P12

use simple project management tools to plan and manage individual and collaborative agile projects, accounting for risks and responsibilities
AC9TDI10P05

design involving and represent them as and

•
Elaborations

• designing an or modifying an existing to fix, extend or improve it, for example fixing a bug in an to detect if 2 shapes intersect when the shapes just touch or extending the to support a new shape
• describing using or other appropriate diagram types, for example a decision tree for classifying an animal based on physical characteristics
• describing precisely and succinctly using , for example short, unambiguous statements such as IF length of word is greater than 4 AND first letter is a■vowel
• using Boolean operations (that is, AND, OR and NOT) to express complex conditions in , for example IF [the temperature is above 30 degrees AND people are inside the building] THEN open the windows
Students learn to:
design algorithms involving logical operators and represent them as flowcharts and

(AC9TDI10P05)
General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

• Interpret concepts and problems

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Analysing

• Interpret concepts and problems

Creating and exchanging

• Plan

• Create, communicate and collaborate

Analysing

• Interpret concepts and problems

Creating and exchanging

• Plan

• Create, communicate and collaborate

Analysing

• Interpret concepts and problems

Creating and exchanging

• Plan

• Create, communicate and collaborate

Analysing

• Interpret concepts and problems

Creating and exchanging

• Plan

• Create, communicate and collaborate

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9M9P01
AC9M9P02
AC9M9SP03
AC9M10P01
AC9M10P02

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context

• identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
• identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
• identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content

and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
• identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Interpret concepts and problems

Critical and Creative Thinking: Analysing: Interpret concepts and problems

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• identify the relevant aspects of a concept or problem, recognising gaps or missing elements necessary for understanding by using approaches and strategies suitable for the context
• identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative

projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P05

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content
and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively
communicate and collaborate, inclusive of diverse groups

AC9TDI10P06

validate and programs by comparing their output against a range of

•

•

Elaborations

• tracing and debugging an by identifying when its state is unexpected, why this has occurred, and
the changes needed to correct it, for example identifying that a loop has finished one too early

• determining boundary and testing that they are handled correctly by a program, for example
checking that an intersection is detected when 2 shapes are perfectly aligned

• generating invalid and user errors and testing that they are handled appropriately by a program,
for example checking that a program does not crash when text is entered instead of a■number

Students learn to:

validate algorithms and programs by comparing their output against a range of test

(AC9TDI10P06)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum
priorities.

Creating and exchanging

• Create, communicate and collaborate

Measurement and geometry

• Understanding geometric properties

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to
general capabilities and cross-curriculum priorities. Content elaborations are optional .

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Related content

This content description can be taught with the following content descriptions from other learning
areas.

AC9M9SP03

AC9M10SP03

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Understanding geometric properties

Numeracy: Measurement and geometry: Understanding geometric properties

Content description

AC9TDI10P06

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Properties of shapes and objects

• investigates and uses reasoning to explain the properties of a triangle (e.g. explains why the longest side is always opposite the largest angle in a triangle; recognises that the combined length of 2 2 2 sides of a triangle must always be greater than the length of the third side)

• uses relevant properties of common geometrical shapes to determine unknown lengths and angles

Transformations

• enlarges and reduces shapes according to a given scale factor and explains what features change and what stay the same (e.g. says 'when I double the dimensions of the rectangle, all of the lengths are twice as long as they were, but the size of the angles stay the same)

• applies angle properties to solve problems that involve the transformation of shapes and objects and how they are used in practice (e.g. determines which shapes tessellate)

Angles

• uses angle properties to identify perpendicular and parallel lines (e.g. develops a computer-aided design drawing involving the creation of parallel and perpendicular lines)

• demonstrates that the angle sum of a triangle is 180 180 1 8 0 ■ and uses this to solve problems

• identifies interior angles in shapes to calculate angle sum

• uses angle properties to identify and calculate unknown angles in familiar two-dimensional shapes

Geometric properties

• uses Pythagoras' theorem to solve right-angled triangle problems

• determines the conditions for triangles to be similar

• determines the conditions for triangles to be congruent

Transformations

• uses the enlargement transformation to explain similarity and develop the conditions for triangles to be similar

• solves problems using ratio and scale factors in similar figures

Angles

• uses angle properties to reason geometrically, in order to solve spatial problems (e.g. applies an understanding of the relationship between the base angles of an isosceles triangle to determine the size of a similar shape in order to solve a problem)

• uses trigonometry to calculate the unknown angles and unknown distances in authentic problems (e.g. measures the height of a tree using a clinometer to measure the angle of inclination and trigonometry to approximate the vertical height; calculates the angle of inclination for a ramp)

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P06

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
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AC9TDI10P07

design and the of a

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Elaborations

• designing engaging , considering aesthetics, functionality and the feeling of enjoyment and satisfaction of the user
• prototyping a , using simple graphical tools that support clicking on an image to change slides or views, for example using a presentation tool or a no-code prototyping tool to design a simple mobile
• considering all aspects of a product as perceived by the users, for example evaluating users' initial experience of setting up and using a system, or users' emotional or cultural response to using a
• designing documentation, branding and marketing for a digital solution, for example a product demonstration screencast or 'getting started' user guide

Students learn to:

design and prototype the user experience of a digital system

(AC9TDI10P07)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Creating and exchanging

• Plan
• Create, communicate and collaborate

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Creating and exchanging

• Plan
• Create, communicate and collaborate

Creating and exchanging

• Plan
• Create, communicate and collaborate

Creating and exchanging

• Plan

• Create, communicate and collaborate

Creating and exchanging

• Plan

• Create, communicate and collaborate

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• use simple planning tools to develop and follow a plan to complete individual and collaborative
projects

• use project management tools to develop and track a plan to complete individual and collaborative
projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content
and effectively communicate and collaborate with wider groups

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communicate and collaborate, inclusive of diverse groups

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• use simple planning tools to develop and follow a plan to complete individual and collaborative
projects

• use project management tools to develop and track a plan to complete individual and collaborative
projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P07

Continuum extract

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communicate and collaborate, inclusive of diverse groups

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative
projects
• use project management tools to develop and track a plan to complete individual and collaborative
projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content
and effectively communicate and collaborate with wider groups
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communicate and collaborate, inclusive of diverse groups

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P07

Continuum extract

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• use simple planning tools to develop and follow a plan to complete individual and collaborative
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Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content
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communicate and collaborate, inclusive of diverse groups

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative
projects
• use project management tools to develop and track a plan to complete individual and collaborative
projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P07

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

AC9TDI10P08

generate, modify, communicate and critically evaluate alternative designs

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Elaborations

• eliminating design ideas by evaluating them against the and , for example in consultation with stakeholders, reviewing the design ideas, making modifications if necessary, and further developing the design of the preferred solution
• using a range of ideation techniques to create multiple design ideas for a solution, for example using graphic organisers, role-play and mind mapping to develop and then record a range of ideas without evaluating them first
• combining the output from generative AI and human capital from recognised experts to meet a specific need; for example, using a range of outputs from an image generator as inspiration for a 3D character in a game

Students learn to:

generate, modify, communicate and critically evaluate alternative designs

(AC9TDI10P08)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Generating

• Create possibilities
• Consider alternatives

Speaking and listening

• Interacting

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Generating

• Create possibilities
• Consider alternatives

Creating and exchanging

• Create, communicate and collaborate

Generating

• Create possibilities

Creating and exchanging

• Create, communicate and collaborate

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9AMA10D01

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Create possibilities

Critical and Creative Thinking: Generating: Create possibilities

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• create possibilities by adapting, combining or elaborating on new and known ideas, and proposing a range of different or creative combinations
• create possibilities by connecting or adapting complex ideas and proposing innovative and detailed variations or combinations

Snapshot – Consider alternatives

Critical and Creative Thinking: Generating: Consider alternatives

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• consider alternatives by creatively adapting ideas when information is limited or conflicting and recommend a preferred option
• consider alternatives by creatively revising and modifying ideas and recommendations when circumstances change

Snapshot – Interacting

Literacy: Speaking and listening: Interacting

Content description

AC9TDI10P08

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.
• interacts within school context or the broader community, adjusting language and responses to suit purpose and audience
• synthesises ideas from group discussion into a common theme or hypothesis
• poses problems, hypothesises and formulates questions about abstract ideas in group situations
• restates different views and makes suggestions to negotiate agreement
• poses questions to clarify assumptions made by the speaker
• questions others to evaluate accuracy of thinking or problem-solving processes
• uses language to align the listener with personal position (e.g. "of course", "as you can imagine", "obviously")
• interacts strategically and confidently with a broad range of interactional partners
• gives an extended explanation and evaluation of a complex concept, issue or process
• justifies a personal stance, after analysis of arguments on a particular issue, using evidence and elaboration in a group situation
• uses language strategically to subtly align others to own perspective as appropriate to audience and purpose

Snapshot – Create possibilities

Critical and Creative Thinking: Generating: Create possibilities

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• create possibilities by adapting, combining or elaborating on new and known ideas, and proposing a range of different or creative combinations
• create possibilities by connecting or adapting complex ideas and proposing innovative and detailed variations or combinations

Snapshot – Consider alternatives

Critical and Creative Thinking: Generating: Consider alternatives

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• consider alternatives by creatively adapting ideas when information is limited or conflicting and recommend a preferred option
• consider alternatives by creatively revising and modifying ideas and recommendations when circumstances change

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Create possibilities

Critical and Creative Thinking: Generating: Create possibilities

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• create possibilities by adapting, combining or elaborating on new and known ideas, and proposing a range of different or creative combinations
• create possibilities by connecting or adapting complex ideas and proposing innovative and detailed variations or combinations

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P08

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

AC9TDI10P09

implement, modify and , applying selected and structures, including in an

•

Elaborations
• writing and editing programs to solve problems using and structures in general-purpose and , such as Python, JavaScript or■C#
• debugging a program by locating an error, modifying the program, and verifying that the changes made are correct, for example identifying the line in the code where an error occurs by reading an error message, printing out the to deduce what is causing the problem, and testing any fixes by entering that could create similar errors
• reading and interpreting programs split across files, functions or classes, and modifying them to add functionality, for example using the codebase of an existing adventure game and building new characters, levels or abilities
• writing programs that receive from the user that determines the program's behaviour, for example processing a file that contains timestamped captured by an altitude sensor from a plastic bottle rocket to graph its flight path
• applying simple structures and appropriately in their programs, for example using an array to

store temperature for a month, a dictionary to store character information in a role-playing game (RPG), and the search function from a library to find a value in a sorted array

• defining their own classes to and define the actions that can be performed on in their programs, for example defining a class for a book that stores information such as the author, title and publisher, and methods that are used to track the book's status in a library management system or store inventory

• selecting different structures such as array, record and object to structured

Students learn to:

implement, modify and debug modular programs, applying selected algorithms and including in an object-oriented programming language

(AC9TDI10P09)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Creating and exchanging

• Create, communicate and collaborate

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
- select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

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Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

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Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

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- select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
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Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

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- select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
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Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

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- select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

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Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P09

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

AC9TDI10P10

evaluate existing and student solutions against the , , possible future impact and opportunities for enterprise

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Elaborations

• evaluating how an existing solution detects violations of site rules and imposes sanctions as described in the Safety by Design Vision for Young People, for example enforcing rules using artificial intelligence and human moderators to detect inappropriate behaviour, and consistently imposing consequences
• judging the quality of the output of their solution against the , for example confirming that the stock levels recorded by their inventory management application are accurate within allowed parameters
• evaluating how existing products have pivoted to meet the needs of a different set of users, for example how new social media applications continue to expand the types of media people share and the interactions they have online
• examining the unintended consequences of an image generation solution implemented using AI; for example, using a trained on a homogenous population to generate graphics that do not represent the diversity of customers in a website's target audience
• considering the complexities associated with training predictive to capture events that occur with low probability; for example, in training for an autonomous vehicle, including a person lying on the road and the correct behaviour for that situation
Students learn to:

evaluate existing and student solutions against the design criteria, user stories, pos impact and opportunities for enterprise

(AC9TDI10P10)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Analysing

• Draw conclusions and provide reasons
• Evaluate actions and outcomes

Reading and viewing

• Understanding texts

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Analysing

• Draw conclusions and provide reasons
• Evaluate actions and outcomes

Analysing

• Draw conclusions and provide reasons

• Evaluate actions and outcomes

Analysing

• Draw conclusions and provide reasons

• Evaluate actions and outcomes

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9TDI10P10

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made

• draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P10

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions

• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Understanding texts

Literacy: Reading and viewing: Understanding texts

Content description

AC9TDI10P10

Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.

Comprehension

• reads and views complex texts (see Text complexity)

• identifies the main themes or concepts in complex texts by synthesising key ideas or information

• summarises the text, identifying key details only

• draws inferences, synthesising clues and evidence across a text

• builds meaning by actively linking ideas from a number of texts or a range of digital sources

• distils information from a number of texts according to task and purpose (e.g. uses graphic organisers)

• identifies different interpretations of the text citing evidence from a text

• evaluates language features for relevance to purpose and audience

• analyses texts that have more than one purpose and explains how parts of the text support a particular purpose

• analyses the use of language appropriate to different types of texts (e.g. compare the use of pun in imaginative and persuasive texts)

• identifies techniques used to obscure author's purpose (e.g. inclusion or omission of content)

Processes

• uses processes such as predicting, confirming predictions, monitoring, and connecting relevant elements of the text to build or repair meaning

• uses knowledge of a broader range of cohesive devices to track meaning (e.g. word associations) (see Grammar)

• selects reading or viewing strategies appropriate to reading purpose (e.g. scans text for evidence)

• judiciously selects texts for learning area tasks and purposes

Vocabulary

• identifies language used to create tone or atmosphere

• analyses language and visual features in texts using metalanguage (e.g. cohesion, interpretation, figurative)

• applies knowledge of base words and word origins to understand the meaning of unfamiliar, discipline-specific words

• uses a range of context and grammatical cues to understand unfamiliar words

• interprets complex figurative language (e.g. euphemisms, hyperbole)

Comprehension

• reads and views complex or some highly complex texts (see Text complexity)

• interprets abstract concepts integrating complex ideas

• analyses how language features are used to support the point of view in a text (e.g. the strategic use of images such as a cartoon in an editorial)

• draws inferences using evidence from the text and discounting possible inferences that are not supported by the text

• applies and articulates criteria to evaluate the language structures and features for relevance to purpose and audience

• evaluates the reasoning and evidence in a persuasive text

• explains how context (e.g. time, place, situation) influences interpretations of a text

• analyses the author's perspectives in complex or some highly complex texts

• analyses the techniques authors use to position readers

• recognises when ideas or evidence have been omitted from a text to position the reader

Processes

• automatically integrates a range of processes such as predicting, confirming predictions, monitoring and connecting relevant elements of the text, to build meaning

• describes how sophisticated cohesive devices establish patterns of meaning (e.g. "class" – "subclass")

• navigates extended texts including complex digital texts

Vocabulary

• demonstrates an understanding of nuances and subtleties in words of similar meaning (e.g. "frustrated", "discouraged", "baffled")

• verifies interpretations of unfamiliar words using grammatical and contextual cues

Comprehension

• reads and views highly complex texts (see Text complexity)

• interprets symbolism in texts, providing evidence to justify interpretation

• judiciously selects and synthesises evidence from multiple texts to support ideas and arguments

• analyses the credibility and validity of primary and secondary sources

• evaluates the use of devices such as analogy, irony, rhetoric and satire, and how they contribute to an author's individual style

• analyses the cumulative impact of use of language features and vocabulary across texts

• explains assumptions, beliefs and implicit values in texts (e.g. "economic growth is always desirable")

• evaluates the social, moral and ethical positions taken in texts

Processes

• strategically adjusts the processes of reading and viewing to build meaning according to the demands of tasks and texts

• identifies subtle contradictions and inconsistencies in texts

Vocabulary

• interprets complex, formal and impersonal language in academic texts

• uses lexical cues to interpret unfamiliar vocabulary

• demonstrates self-reliance in exploration and application of word learning strategies

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9TDI10P10

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
• draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P10

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9TDI10P10

Continuum extract

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• draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P10

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• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

Snapshot – Draw conclusions and provide reasons

Critical and Creative Thinking: Analysing: Draw conclusions and provide reasons

Content description

AC9TDI10P10

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• draw conclusions and make choices when completing tasks by connecting evidence from within and across discipline areas to provide reasons and evaluate arguments for choices made
• draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

Snapshot – Evaluate actions and outcomes

Critical and Creative Thinking: Analysing: Evaluate actions and outcomes

Content description

AC9TDI10P10

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• evaluate the effectiveness of a course of action or the outcome of a task and account for expected and unexpected results, including using a given or co-developed set of criteria to support decisions
• evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions

AC9TDI10P11

select and use emerging and to create and communicate for a diverse audience

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Elaborations

• locating relevant content by using Boolean operators or artificial intelligence search of search engines and desktop search, for example with 'and' and 'not' or advanced image similarity■search
• using emerging technologies to add dynamic to content, for example using a QR code to trigger an augmented reality (AR) overlay of how to use a tool safely in the workshop
• incorporating interactive elements into content to assist with analysis, for example adding sliders to visualisations to allow the user to control and view time series
• ensuring content is accessible by using built-in accessibility , for example using ALT tags in images inside HTML to ensure screen readers can communicate content for people who are visually impaired
• combining the output from multiple generative AI sources to communicate a complex idea or narrative; for example, using images, sounds and text from a variety of tools to produce an interactive animation

Students learn to:

select and use emerging digital tools and advanced features to create and commun content for a diverse audience

(AC9TDI10P11)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Creating and exchanging

• Create, communicate and collaborate

Managing and operating

• Select and operate tools

Social management

• Communication

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Investigating

• Locate information

Creating and exchanging

• Create, communicate and collaborate

Managing and operating

• Select and operate tools

Creating and exchanging

• Create, communicate and collaborate

Creating and exchanging

• Create, communicate and collaborate

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P11

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups

• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10P11

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks

• troubleshoot common problems and automate repetitive tasks

• select and operate advanced and emerging digital tools confidently

• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Communication

Personal and Social capability: Social management: Communication

Content description

AC9TDI10P11

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• demonstrate communication skills in a range of contexts, responding to the enablers of, and barriers to, effective verbal and non-verbal communication

• devise strategies that apply effective verbal and non-verbal communication in response to feedback

Snapshot – Locate information

Digital Literacy: Investigating: Locate information

Content description

AC9TDI10P11

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• locate, select and retrieve relevant information from multiple sources, exploring advanced search functions and targeted criteria

• locate relevant information by applying advanced search functions across multiple sources involving purposefully selected and contextually specific terms and criteria

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P11

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

• select and control advanced features of appropriate digital tools to independently create content

and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Select and operate tools

Digital Literacy: Managing and operating: Select and operate tools

Content description

AC9TDI10P11
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and use the advanced or unfamiliar features of digital tools to efficiently complete tasks
• troubleshoot common problems and automate repetitive tasks
• select and operate advanced and emerging digital tools confidently
• troubleshoot common problems systematically and seek to improve efficiency by developing new skills

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P11
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P11
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

AC9TDI10P12

use simple to plan and manage individual and collaborative , accounting for risks and responsibilities

•

•

Elaborations
• managing collaborative projects using appropriate platforms, for example sharing code development using a collaborative version control tool such as GitHub to plan, and manage a project with their peers
• establishing clear lines of responsibility and tasks for all members of a project team, for example assigning roles to all team members and using a spreadsheet to sequence tasks and track progress to ensure all work is completed by a specified deadline
• using relevant legislation or guidelines to inform their solutions, for example correctly controlling and treating collected from users by applying techniques that ensure protection, and copyright requirements are followed
• planning the creation of content using to mitigate potential risks or project delays, for example incorporating techniques including scheduling, revision, and evaluation into common collaboration tools to ensure timely delivery of effective solutions
• accounting for appropriate responsibilities, for example when collaborating with First Nations

Australians' community groups to develop digital solutions to projects: following cultural protocols, including relevant permissions and attributions; acknowledging diversity, capability and strength; and addressing risks and responsibilities such as , and accuracy of

• incorporating suggestions made by built-in virtual assistants in project planning and organisation tools to streamline and prioritise work; for example, using AI to summarise meeting outcomes, identify important tasks and forecast project risks

Students learn to:

use simple project management tools to plan and manage individual and collaborat accounting for risks and responsibilities

(AC9TDI10P12)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Creating and exchanging

• Plan

• Create, communicate and collaborate

Practising digital safety and wellbeing

• Manage online safety

Social management

• Collaboration

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Creating and exchanging

• Plan

• Create, communicate and collaborate

Creating and exchanging

• Plan

Social management

• Collaboration

Creating and exchanging

• Respect intellectual property

Practising digital safety and wellbeing

• Manage digital privacy and identity

Creating and exchanging

• Plan

Creating and exchanging

• Plan

• Respect intellectual property

Culture

• First Nations Australian societies are diverse and have distinct cultural expressions such as language, customs and beliefs. As First Nations Peoples of Australia, they have the right to maintain, control, protect and develop their cultural expressions, while also maintaining the right to control, protect and develop culture as Indigenous Cultural and Intellectual Property.

Related content

This content description can be taught with the following content descriptions from other learning areas.

AC9HP10P10

Resources

Work Samples

WS01 - Digital project: Python game development

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative
projects
• use project management tools to develop and track a plan to complete individual and collaborative
projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content
and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively
communicate and collaborate, inclusive of diverse groups

Snapshot – Manage online safety

Digital Literacy: Practising digital safety and wellbeing: Manage online safety

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• identify online abuse and bullying and report them to trusted adults, appropriate authorities and
in online tools
• stop engaging in negative online social interactions
• engage in safe, legal and ethical online behaviour and defuse negative online social interactions
• recognise the benefits and risks of anonymity online

Snapshot – Collaboration

Personal and Social capability: Social management: Collaboration

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• appreciate diverse perspectives in a range of collaborative contexts, and demonstrate negotiation
skills to improve ways of working and outputs
• devise strategies for collaborative work and outputs in a range of contexts, building on the
perspectives, experiences and capabilities of group members

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative
projects
• use project management tools to develop and track a plan to complete individual and collaborative
projects

Snapshot – Create, communicate and collaborate

Digital Literacy: Creating and exchanging: Create, communicate and collaborate

Content description

AC9TDI10P12
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• select and control advanced features of appropriate digital tools to independently create content and effectively communicate and collaborate with wider groups
• select and control the features of digital tools to purposefully create content and effectively communicate and collaborate, inclusive of diverse groups

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P12
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Snapshot – Collaboration

Personal and Social capability: Social management: Collaboration

Content description

AC9TDI10P12
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• appreciate diverse perspectives in a range of collaborative contexts, and demonstrate negotiation skills to improve ways of working and outputs
• devise strategies for collaborative work and outputs in a range of contexts, building on the perspectives, experiences and capabilities of group members

Snapshot – Respect intellectual property

Digital Literacy: Creating and exchanging: Respect intellectual property

Content description

AC9TDI10P12
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• respect intellectual property by applying practices that comply with ethical and legal obligations, referencing conventions and copyright protocols
• respect intellectual property by identifying and applying practices that meet legal and ethical obligations, referencing conventions, copyright and trademark protocols

Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P12
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• recognise their digital footprint is valuable, used by online tools for targeting, and that data shared online is no longer under their control
• consider who they trust with their data and review privacy policies before giving consent, and seek consent before sharing online
• recognise their actions contribute to their passive digital footprint
• manage their digital identity by controlling privacy, connections and group settings, and curating posts
• consent selectively to data collection after assessing the benefits and risks of an online tool privacy policy

Snapshot – Plan

Digital Literacy: Creating and exchanging: Plan

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• use simple planning tools to develop and follow a plan to complete individual and collaborative projects
• use project management tools to develop and track a plan to complete individual and collaborative projects

Snapshot – Plan

Snapshot – Respect intellectual property

Digital Literacy: Creating and exchanging: Respect intellectual property

Content description

AC9TDI10P12

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• respect intellectual property by applying practices that comply with ethical and legal obligations, referencing conventions and copyright protocols
• respect intellectual property by identifying and applying practices that meet legal and ethical obligations, referencing conventions, copyright and trademark protocols

AC9TDI10P13

develop threat , and explore a , user or

•

•

Elaborations

• using a flow diagram to understand how private information moves through a system and when it would be the most likely target of a cyber attack, for example mapping how moves between the user and server when using a web application, and identifying that sending the in plaintext would make it susceptible to a man-in-the-middle attack
• exploring the impact of a threat by systematically following the steps involved in bypassing a known vulnerability in their own , for example manually changing the value stored in a login cookie to that of another user to observe the impact of unauthorised access on the system
• explaining how techniques like prompt injection can change the intended behaviour of generative AI ; for example, carefully chosen can circumvent any protections or limitations that may have been included in the design of the

Students learn to:

develop cyber security threat models, and explore a software, user or software sup
vulnerability

(AC9TDI10P13)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Practising digital safety and wellbeing

• Manage digital privacy and identity
Managing and operating

• Protect content
Speaking and listening

• Speaking
Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .
Practising digital safety and wellbeing

• Manage digital privacy and identity
Managing and operating

• Protect content
Practising digital safety and wellbeing

• Manage digital privacy and identity
Managing and operating

• Protect content
Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P13
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• recognise their digital footprint is valuable, used by online tools for targeting, and that data shared online is no longer under their control
• consider who they trust with their data and review privacy policies before giving consent, and seek consent before sharing online
• recognise their actions contribute to their passive digital footprint
• manage their digital identity by controlling privacy, connections and group settings, and curating posts
• consent selectively to data collection after assessing the benefits and risks of an online tool privacy policy
Snapshot – Protect content

Digital Literacy: Managing and operating: Protect content

Content description

AC9TDI10P13
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• protect content when sharing by selecting appropriate access controls for individuals and shared links for wider groups
• protect content when sharing by purposefully selecting appropriate access controls for individuals and groups
Snapshot – Speaking

Literacy: Speaking and listening: Speaking

Content description

AC9TDI10P13
Learning progression extract

The following learning progression extract shows the alignment of the learning progression with this content.
Crafting ideas

• creates spoken texts which explore and interpret concepts drawn from research or learning area content
• selects voice appropriate to purpose (e.g. third person to create distance and authority or first person to achieve personal connection)

- develops complex ideas or a central theme across a spoken text
- uses language features according to purpose, to impact the audience (e.g. uses more complex connectives such as "consequently", "accordingly" to explain)
- rephrases or clarifies to repair or refine meaning
- uses language structures and features appropriate to learning area content
- uses technologies and visual and audio resources to enhance meaning and effect in presentations

Vocabulary

- selects vocabulary to intensify and sharpen the focus (e.g. "scarcely", "absolutely", "real", "simply")
- uses a range of evaluative language to express opinions or convey emotion (e.g. "significant benefits", "devastating consequences")
- uses a range of emotive language appropriate to topic, purpose and audience
- uses rich, evocative, descriptive language
- uses figurative language (e.g. "hungry for success")

Crafting ideas

- creates complex and creative spoken texts which analyse and evaluate issues drawn from research or learning area content
- includes a range of alternative viewpoints in spoken texts, where appropriate
- controls and manipulates a sophisticated range of language features to affect the audience
- uses a range of rhetorical devices and humour to engage an audience
- references and quotes authorities or statistics to add authority (e.g. "according to a recent OECD report")
- delivers spoken text flexibly, allowing for questions and maintaining the flow of ideas

Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P13

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- recognise their digital footprint is valuable, used by online tools for targeting, and that data shared online is no longer under their control
- consider who they trust with their data and review privacy policies before giving consent, and seek consent before sharing online
- recognise their actions contribute to their passive digital footprint
- manage their digital identity by controlling privacy, connections and group settings, and curating posts
- consent selectively to data collection after assessing the benefits and risks of an online tool privacy policy

Snapshot – Protect content

Digital Literacy: Managing and operating: Protect content

Content description

AC9TDI10P13

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- protect content when sharing by selecting appropriate access controls for individuals and shared links for wider groups
- protect content when sharing by purposefully selecting appropriate access controls for individuals and groups

Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P13

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.

- recognise their digital footprint is valuable, used by online tools for targeting, and that data shared online is no longer under their control
- consider who they trust with their data and review privacy policies before giving consent, and seek consent before sharing online
- recognise their actions contribute to their passive digital footprint
- manage their digital identity by controlling privacy, connections and group settings, and curating posts
- consent selectively to data collection after assessing the benefits and risks of an online tool privacy policy

Snapshot – Protect content

Digital Literacy: Managing and operating: Protect content

Content description

AC9TDI10P13

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
- protect content when sharing by selecting appropriate access controls for individuals and shared links for wider groups
- protect content when sharing by purposefully selecting appropriate access controls for individuals and groups

AC9TDI10P14

apply the Australian Privacy Principles to critique and manage the that existing systems and student solutions collect

-

-

Elaborations

- critiquing the extent to which online services allow them to control access to their in line with the Australian Privacy Principles, for example assessing whether their social media accounts allow them to update their contact information if these details change, and who else can see that information on the platform
- using the Australian Privacy Principles as a reference to evaluate the steps they are taking to protect user information in their application, for example explaining how they are storing passwords using cryptographic hashing so that a breach does not expose their users to vulnerabilities due to password re-use

Students learn to:

apply the Australian Privacy Principles to critique and manage the digital footprint t systems and student solutions collect

(AC9TDI10P14)

General capabilities and cross-curriculum priorities

This content description connects to the following general capabilities and cross-curriculum priorities.

Practising digital safety and wellbeing

- Manage digital privacy and identity

Responding to ethical issues

- Explore ethical issues
- Making and reflecting on ethical decisions

Understanding ethical concepts and perspectives

- Explore ethical concepts

Elaborations

Content elaborations provide suggestions of ways to teach the content description and connect it to general capabilities and cross-curriculum priorities. Content elaborations are optional .

Practising digital safety and wellbeing

- Manage digital privacy and identity

Responding to ethical issues

- Explore ethical issues

• Making and reflecting on ethical decisions
Understanding ethical concepts and perspectives

• Explore ethical concepts
Practising digital safety and wellbeing

• Manage digital privacy and identity
Responding to ethical issues

• Explore ethical issues
Understanding ethical concepts and perspectives

• Explore ethical concepts
Related content

This content description can be taught with the following content descriptions from other learning
areas.
AC9HP10P10
Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P14
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• recognise their digital footprint is valuable, used by online tools for targeting, and that data
shared online is no longer under their control
• consider who they trust with their data and review privacy policies before giving consent, and
seek consent before sharing online
• recognise their actions contribute to their passive digital footprint
• manage their digital identity by controlling privacy, connections and group settings, and curating
posts
• consent selectively to data collection after assessing the benefits and risks of an online tool
privacy policy
Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9TDI10P14
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse■the relationships between values, ethical perspectives■and ethical frameworks when
responding to ethical issues
• apply knowledge of ethical concepts, values, perspectives and frameworks when responding to
ethical issues
Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on et

Content description

AC9TDI10P14
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• consider how values and beliefs influence approaches to ethical issues, and■analyse■how these
affect■outcomes
• analyse■biases■when applying ethical concepts,■values■and ethical frameworks,■in order to explore
and evaluate ethical decisions
Snapshot – Explore ethical concepts

Ethical Understanding: Understanding ethical concepts and perspectives: Explor

Content description

AC9TDI10P14
Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse■the similarities and differences between ethical concepts, such as integrity, loyalty and equality, in a range of situations and contexts
• evaluate■the consistency in meaning of ethical concepts, such as trust, freedom and rights and responsibilities, in a range of situations and contexts

Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• recognise their digital footprint is valuable, used by online tools for targeting, and that data shared online is no longer under their control
• consider who they trust with their data and review privacy policies before giving consent, and seek consent before sharing online
• recognise their actions contribute to their passive digital footprint
• manage their digital identity by controlling privacy, connections and group settings, and curating posts
• consent selectively to data collection after assessing the benefits and risks of an online tool privacy policy

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse■the relationships between values, ethical perspectives■and ethical frameworks when responding to ethical issues
• apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Making and reflecting on ethical decisions

Ethical Understanding: Responding to ethical issues: Making and reflecting on et

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• consider how values and beliefs influence approaches to ethical issues, and■analyse■how these affect■outcomes
• analyse■biases■when applying ethical concepts,■values■and ethical frameworks,■in order to explore and evaluate ethical decisions

Snapshot – Explore ethical concepts

Ethical Understanding: Understanding ethical concepts and perspectives: Explor

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse■the similarities and differences between ethical concepts, such as integrity, loyalty and equality, in a range of situations and contexts
• evaluate■the consistency in meaning of ethical concepts, such as trust, freedom and rights and responsibilities, in a range of situations and contexts

Snapshot – Manage digital privacy and identity

Digital Literacy: Practising digital safety and wellbeing: Manage digital privacy an

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• recognise their digital footprint is valuable, used by online tools for targeting, and that data shared online is no longer under their control
• consider who they trust with their data and review privacy policies before giving consent, and seek consent before sharing online
• recognise their actions contribute to their passive digital footprint
• manage their digital identity by controlling privacy, connections and group settings, and curating posts
• consent selectively to data collection after assessing the benefits and risks of an online tool privacy policy

Snapshot – Explore ethical issues

Ethical Understanding: Responding to ethical issues: Explore ethical issues

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse■the relationships between values, ethical perspectives■and ethical frameworks when responding to ethical issues
• apply knowledge of ethical concepts, values, perspectives and frameworks when responding to ethical issues

Snapshot – Explore ethical concepts

Ethical Understanding: Understanding ethical concepts and perspectives: Explor

Content description

AC9TDI10P14

Continuum extract

The following continuum extract shows the alignment of the continuum with this content.
• analyse■the similarities and differences between ethical concepts, such as integrity, loyalty and equality, in a range of situations and contexts
• evaluate■the consistency in meaning of ethical concepts, such as trust, freedom and rights and responsibilities, in a range of situations and contexts