Digital Technologies Progression Points – Year 10 v8.3

Independent Schools Queensland (ISQ) has developed Progression Points to support teachers in independent schools with implementation of version 8.3 of the Australian Curriculum.

A Word document version of the Progression Points is available so that teachers can rearrange the sequences of learning.

Personnel in independent schools are encouraged to consider how the Progression Points could be used to: -

* diagnose through formative assessment, the capabilities, strengths and weaknesses of individual students
* plan teaching programs to meet the needs of individuals and groups of students
* formally assess the progress of individuals and groups of students
* report to parents on the achievements of their children against the Australian Curriculum.

The “demonstrating” column accurately reflects the expectations of version 8.3 of the Australian Curriculum achievement standards.

ISQ welcomes any suggestions for improvement from teachers working very closely with the Progression Points.

**Digital Technologies Progression Points – Year 10**

| **Strand and content descriptions for teaching*****Modes*** | **Emerging** | **Developing** | **Demonstrating** | **Advancing**  | **Extending** |
| --- | --- | --- | --- | --- | --- |
| Beginning to work towards the achievement standard  | Working towards the achievement standard | Demonstrating the achievement standard | Working beyond the achievement standard | Extending with depth beyond the achievement standard |
| * *With explicit prompts (step-by-step oral scaffolding, reference to charts, word wall, etc)*
* *In familiar contexts*
* *Learning to follow procedures*
 | * *With prompts (oral or written questions, reference to charts, word walls, etc)*
* *In familiar contexts*
* *Attempts to explain*
 | * *Independent (with access to charts, word walls, etc.)*
* *In familiar contexts*
* *Explains basic understanding*
 | * *Independent (with access to charts, word walls, etc.)*
* *Applying in familiar contexts*
* *Explains with detail*
 | * *Independent (with access to charts, word walls, etc.)*
* *Applying in new contexts*
* *Explains with connections outside the teaching context*
 |
| **Achievement Standard**By the end of Year 10, students [explain](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Explain) the control and management of networked digital systems and the security implications of the interaction between hardware, software and users. They [explain](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Explain) simple data compression, and why content data are separated from presentation.Students plan and manage digital projects using an iterative approach. They define and decompose complex problems in terms of functional and non-functional requirements. Students [design](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Design) and [evaluate](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Evaluate) user experiences and algorithms. They [design](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Design) and implement modular programs, including an object-oriented program, using algorithms and data structures involving modular functions that reflect the relationships of real-world data and data entities. They take account of privacy and security requirements when selecting and validating data. Students test and [predict](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Predict) results and implement digital solutions. They [evaluate](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Evaluate) information systems and their solutions in terms of risk, sustainability and potential for innovation and enterprise. They share and collaborate online, establishing protocols for the use, transmission and maintenance of data and projects. |
| **Content Descriptions** | Students [explain](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Explain) the control and management of networked digital systems and the security implications of the interaction between hardware, software and users. |
| **KNOWLEDGE AND UNDERSTANDING** | Investigate the role of hardware and software in managing, controlling and securing the movement of and access to [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) in networked digital systems [(ACTDIK034)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIK034) | **With explicit prompts, students can:*** **state** ideas relating to robotic process control systems.
* **explore** encryption of data.

*EG. Secret keys and ‘exclusive or’ (XOR) and hashing algorithms to digitally sign data.* | **With prompts, students can:** * **identify** robotic process control systems.
* **define** encryption of data as a means of protecting data.

*EG. Secret keys and ‘exclusive or’ (XOR) and hashing algorithms to digitally sign data.* | **Independently, students can:*** **investigate and explain** the operation and use of robotic process control systems.
* **explain** encryption of data as a means of protecting data.

E*G. Secret keys and ‘exclusive or’ (XOR) and hashing algorithms to digitally sign data.* | **Independently, students can:*** **analyse** **and discuss** the operation and use of robotic process control systems.
* **discuss** encryption of data as a means of protecting data.

*EG. Secret keys and ‘exclusive or’ (XOR) and hashing algorithms to digitally sign data.* | **Independently and consistently students can:*** **demonstrate and compare** the operation and use of robotic process control systems.
* **compare** systems of encryption of data as a means of protecting data.

*EG. Secret keys and ‘exclusive or’ (XOR) and hashing algorithms to digitally sign data.* |
|  | Students explain simple data compression, and why content data are separated from presentation. |
| **KNOWLEDGE AND UNDERSTANDING** | Analyse simple [compression](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=compression) of [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) and how content [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) are separated from presentation [(ACTDIK035)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIK035) | **With explicit prompts, students can:*** **identify** simple compression schemes to reduce the size of repetitive data.

*EG. How run length encoding reduces the size of images.** **state** the difference between lossy and lossless compression.

*EG. The difference between JPEG and PNG images*. | **With prompts, students can:** * **describe** simple compression schemes to reduce the size of repetitive data.

*EG. How run length encoding reduces the size of images.** **define** the difference between lossy and lossless compression.

*EG. The difference between JPEG and PNG images*. | **Independently, students can:*** **explain** how simple compression schemes reduce the size of repetitive data.

*EG. How run length encoding reduces the size of images.** **explain** the difference between lossy and lossless compression.

*EG. The difference between JPEG and PNG images*. | **Independently, students can:** * **discuss** how simple compression schemes reduce the size of repetitive data.

*EG. How run length encoding reduces the size of images*.* **discuss** the difference between lossy and lossless compression.

*EG. The difference between JPEG and PNG images*. | **Independently and consistently students can:*** **compare** how simple compression schemes reduce the size of repetitive data.

*EG. How run length encoding reduces the size of images*.* **compare** the difference between lossy and lossless compression.

*EG. The difference between JPEG and PNG images*. |
|  | Students take account of privacy and security requirements when selecting and validating data. |
| **PROCESSES AND PRODUCTION SKILLS** | Develop techniques for acquiring, storing and validating quantitative and qualitative [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) from a range of sources, considering privacy and security requirements [(ACTDIP036)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP036) | **With explicit prompts, students can:*** **identify** strategies to ensure the privacy and security of survey data.

*EG. Using numbers rather than names as identifiers; password protecting files to reduce risks of modifying data and using CAPTCHA™ to confirm human responses*.* **identify** data from external sources.

*EG. Combining mapping data from multiple electronic data sets to build a composite representation.* | **With prompts, students can:*** **identify and select** strategies to ensure the privacy and security of survey data.

*EG. Using numbers rather than names as identifiers; password protecting files to reduce risks of modifying data and using CAPTCHA™ to confirm human responses.** **analyse** data from external sources.

*EG. Combining mapping data from multiple electronic data sets to build a composite representation.* | **Independently, students can:*** **identify and develop** strategies to ensure the privacy and security of survey data.

*EG. Using numbers rather than names as identifiers; password protecting files to reduce risks of modifying data and using CAPTCHA™ to confirm human responses.** **explain** specific data from an external source and storing it in a format that is more useful for analysis.

*EG. Combining mapping data from multiple electronic data sets to build a composite representation*. | **Independently, students can:** * **develop** and **apply** strategies to ensure the privacy and security of survey data.

*EG. Using numbers rather than names as identifiers; password protecting files to reduce risks of modifying data and using CAPTCHA™ to confirm human responses.** **apply** methods to extract specific data from an external source and storing it in a format that is more useful for analysis.

*EG. Combining mapping data from multiple electronic data sets to build a composite representation*. | **Independently and consistently students can:*** **develop** and **create** strategies to ensure the privacy and security of survey data.

*EG. Using numbers rather than names as identifiers; password protecting files to reduce risks of modifying data and using CAPTCHA™ to confirm human responses.** **create** methods to extract specific data from an external source and storing it in a format that is more useful for analysis.

*EG. Combining mapping data from multiple electronic data sets to build a composite representation*. |
| **PROCESSES AND PRODUCTION SKILLS** | Analyse and visualise [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) to create information and address complex problems, and [model](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=model) processes, entities and their relationships using structured [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) [(ACTDIP037)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP037) | **With explicit prompts, students can:*** **identify** some automatic calculations in spreadsheets from built-in functions and cell referencing
* **identify** simple simulations or iterative processes that model concepts using a spreadsheet

*EG. Modelling compound interest or ecological models using a spreadsheet.** **identify** schemas that represent relationships between entities and **query** data across tables.

*EG. Using foreign keys to represent relationships and joining tables in structured query language (SQL) SELECT statements*. | **With prompts, students can:** * **identify** automatic calculations in spreadsheets from built-in functions and cell referencing
* **explain** simple simulations or iterative processes that model concepts using a spreadsheet

*EG. Modelling compound interest or ecological models using a spreadsheet.** **describe** schemas that represent relationships between entities and **query** data across tables.

*EG. Using foreign keys to represent relationships and joining tables in structured query language (SQL) SELECT statements.* | **Independently, students can:*** **analyse** calculations in spreadsheets using built-in functions and cell referencing
* **analyse** simple simulations or iterative processes that model concepts using a spreadsheet

*EG. Modelling compound interest or ecological models using a spreadsheet.** **develop** schemas that represent relationships between entities and **query** data across tables.

*EG. Using foreign keys to represent relationships and joining tables in structured query language (SQL) SELECT statements*. | **Independently, students can:** * **develop** automated calculations in spreadsheets using in built-in functions and cell referencing
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*EG. Modelling compound interest or ecological models using a spreadsheet*.* **apply** schemas that represent relationships between entities and **query** data across tables.

*EG. Using foreign keys to represent relationships and joining tables in structured query language (SQL) SELECT statements*. | **Independently and consistently students can:*** **create** automated calculations in spreadsheets using built-in functions and cell referencing
* **create** simple simulations and iterative processes to model concepts using a spreadsheet

*EG. Modelling compound interest or ecological models using a spreadsheet.** **create** schemas that represent relationships between entities and **query** data across tables.

*EG. Using foreign keys to represent relationships and joining tables in structured query language (SQL) SELECT statements*. |
|  | Students define and decompose complex problems in terms of functional and non-functional requirements. |
| **PROCESSES AND PRODUCTION SKILLS** | Define and [decompose](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=decompose) real-world problems precisely, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs [(ACTDIP038)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP038) | **With explicit prompts, students can:*** **decompose, investigate** and **identify** some different types of functional requirements for solutions.

*EG. Increasing the speed of processing, calculating new results, improving the quality of reports.** **investigate** and **identify** some different types of non-functional requirements for solutions.

*EG. Considering how the requirements of reliability, user-friendliness, portability and robustness could affect the way people use solutions.**EG. Using SCAMPER to decompose solutions*. | **With prompts, students can:** * **decompose, investigate** and **describe** different types of functional requirements for solutions.

*EG. Increasing the speed of processing, calculating new results, improving the quality of reports.** **decompose, investigate** and **identify** different types of non-functional requirements for solutions.

*EG. Considering how the requirements of reliability, user-friendliness, portability and robustness could affect the way people use solutions.**EG. Using SCAMPER to decompose solutions*. | **Independently, students can:*** **decompose, investigate** and **explain** different types of functional requirements for solutions.

*EG. Increasing the speed of processing, calculating new results, improving the quality of reports*.* **decompose, investigate** and **explain** different types of non-functional requirements for solutions.

*EG. Considering how the requirements of reliability, user-friendliness, portability and robustness could affect the way people use solutions.**EG. Using SCAMPER to decompose solutions*.  | **Independently, students can:** * **decompose, investigate** and **discuss** different types of functional requirements for solutions.

*EG. Increasing the speed of processing, calculating new results, improving the quality of reports.** **investigate** and **discuss** different types of non-functional requirements for solutions.

*EG. Considering how the requirements of reliability, user-friendliness, portability and robustness could affect the way people use solutions.**EG. Using SCAMPER to decompose solutions.* | **Independently and consistently students can:*** **decompose, investigate** and **evaluate** different types of functional requirements for solutions.

*EG. Increasing the speed of processing, calculating new results, improving the quality of reports*.* **investigate** and **evaluate** different types of non-functional requirements for solutions.

*EG. Considering how the requirements of reliability, user-friendliness, portability and robustness could affect the way people use solutions.**EG. Using SCAMPER to decompose solutions*. |
| **PROCESSES AND PRODUCTION SKILLS** | Design the user experience of a [digital system](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=digital+system) by [evaluating](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=evaluating) alternative **designs** against criteria including [functionality](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=functionality), [accessibility](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=accessibility), usability, and [aesthetics](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=aesthetics) [(ACTDIP039)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP039) | **With explicit prompts, students can:*** **identify** some aspects of the total user experience, that is, all aspects of the system as perceived by the users.

*EG. A user’s initial experience of setting up and using a system, or a user’s emotional or cultural response to using a digital system.** **identify** some aspects associated with documentation, branding, and marketing for a digital solution.

*EG. A product demonstration screencast or ‘getting started’ user guide.** **identify** some principles and elements of design to a client’s requirements.

*EG. Using customer feedback to refine a user interface to more effectively provide access to important features.* | **With prompts, students can:** * **identify** all aspects of the total user experience, that is, all aspects of the system as perceived by the users.

*EG. A user’s initial experience of setting up and using a system, or a user’s emotional or cultural response to using a digital system.** **identify** and **define** aspects associated with documentation, branding, and marketing for a digital solution.

*EG. A product demonstration screencast or ‘getting started’ user guide.** **identify** and **define** some principles and elements of design to a client’s requirements and **complete superficial evaluation** of the success of a solution through a feedback process.

*EG. Using customer feedback to refine a user interface to more effectively provide access to important features*. | **Independently, students can:*** **identify** and **define** aspects of the total user experience, that is, all aspects of the system as perceived by the users.

*EG. A user’s initial experience of setting up and using a system, or a user’s emotional or cultural response to using a digital system.** **apply** design principles to draft documentation, branding, and marketing for a digital solution.

*EG. A product demonstration screencast or ‘getting started’ user guide*.* **apply** some principles and elements of design to a client’s requirements and **complete a basic** **evaluation** of the success of a solution through a feedback process.

*EG. Using customer feedback to refine a user interface to more effectively provide access to important features*. | **Independently, students can:** * **evaluate** some aspects of the total user experience, that is, all aspects of the system as perceived by the users.

*EG. A user’s initial experience of setting up and using a system, or a user’s emotional or cultural response to using a digital system*.* **design** documentation, branding, and marketing for a digital solution.

*EG. A product demonstration screencast or ‘getting started’ user guide*.* **apply** some principles and elements of design to a client’s requirements and **complete detailed evaluation** of the success of a solution through an iterative feedback process.

*EG. Using customer feedback to refine a user interface to more effectively provide access to important features.* | **Independently and consistently students can:*** **critically evaluate** all aspects of the total user experience, that is, all aspects of the system as perceived by the users.

*EG. A user’s initial experience of setting up and using a system, or a user’s emotional or cultural response to using a digital system.** **design** and **create** documentation, branding, and marketing for a digital solution.

*EG. A product demonstration screencast or ‘getting started’ user guide*.* **apply** the principles and elements of design to a client’s requirements and **critically evaluate** the success of a solution through an iterative feedback process.

*EG. Using customer feedback to refine a user interface to more effectively provide access to important features*. |
|  | Students [design](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Design) and [evaluate](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Evaluate) user experiences and algorithms. Students test and [predict](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Predict) results and implement digital solutions. |
| **PROCESSES AND PRODUCTION SKILLS** | Design algorithms represented diagrammatically and in [structured English](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=structured+English) and validate algorithms and programs through tracing and test cases [(ACTDIP040)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP040) | **With explicit prompts, students can:*** **explore** tracing techniques that can be used to test algorithms.
* **understand** that test cases can be used that correspond to the requirements of the specifications.

*EG. Validating program behaviour on a range of valid and invalid user input*. | **With prompts, students can:** * **identify** tracing techniques to test algorithms.
* **identify** and **apply** some knowledge from test cases that correspond to the requirements of the specifications.

*EG. Validating program behaviour on a range of valid and invalid user input*. | **Independently, students can:*** **use** existing tracing techniques to test algorithms.
* **use** existing test cases that correspond to the requirements of the specifications.

*EG. Validating program behaviour on a range of valid and invalid user input*. | **Independently, students can:*** **apply** tracing techniques to test algorithms with some success.
* **develop** test cases that correspond to the requirements of the specifications.

*EG. Validating program behaviour on a range of valid and invalid user input*. | **Independently and consistently students can:*** **create** tracing techniques to test algorithms repeatedly with success.
* **develop** and **evaluates** test cases that correspond to the requirements of the specifications.

*EG. Validating program behaviour on a range of valid and invalid user input*. |
|  | Students [design](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Design) and implement modular programs, including an object-oriented program, using algorithms and data structures involving modular functions that reflect the relationships of real-world data and data entities. |
| **PROCESSES AND PRODUCTION SKILLS** | **Implementing**Implement modular programs, applying selected algorithms and [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) structures including using an object-oriented programming language [(ACTDIP041)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP041)  | **With explicit prompts, students can:*** **identify** different algorithms and selects an appropriate one for the type of problem with limited success.

*EG. Choosing appropriate algorithms for particular problems.** **identify** different types of data structures with some success.
 | **With prompts, students can:** * **identify** different algorithms and selects an appropriate one based on the type of problem.

*EG. Choosing appropriate algorithms for particular problems.** **identify** different types of data structures with repeated success.
 | **Independently, students can:*** **design** different algorithms and selects an appropriate one based on the type of problem.

*EG. Choosing appropriate algorithms for particular problems.** **explain and select** different types of data structure appropriately.
 | **Independently, students can:*** **design and consider** different algorithms and selects the most appropriate based on the type of problem.

*EG. Choosing appropriate algorithms for particular problems.** **compare and select** different types of data structures appropriately and consistently.
 | **Independently and consistently students can:*** **design, consider** and **evaluate** different algorithms and selects the most appropriate based on the type of problem.

*EG. Choosing appropriate algorithms for particular problems.** **compare, evaluate** and **select** different types of data structures appropriately and consistently.
 |
|  | They [evaluate](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Evaluate) information systems and their solutions in terms of risk, sustainability and potential for innovation and enterprise. |
| **PROCESSES AND PRODUCTION SKILLS** | Evaluate critically how student solutions and existing information systems and policies, take account of future risks and sustainability and provide opportunities for innovation and [enterprise](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=enterprise) [(ACTDIP042)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP042) | **With explicit prompts, students can:*** **explore** the ICT policy for schooling and the impact on education.

*EG.* *Australian Government Protective Security Policy Framework*, the *Australian Government ICT Sustainability Plan 2010–2015;* the *Green Growth Policy* in Korea and the *Korean National Strategy for Sustainable Development.** **identify** with basic accuracy the ‘terms of use’ policies on social media networks and **state** the ways in which these can support advocacy of change and protection of individuals and societies.
* **explore** state, national and regional policies and **draws superficial conclusions** about the potential impact of each.
 | **With prompts, students can:*** **explore and identify aspects** of the ICT policy for schooling and the impact on education.

*EG.* *Australian Government Protective Security Policy Framework*, the *Australian Government ICT Sustainability Plan 2010–2015;* the *Green Growth Policy* in Korea and the *Korean National Strategy for Sustainable Development.** **describe**, with basic accuracy the ‘terms of use’ policies on social media networks and **state** the ways in which these can support advocacy of change and protection of individuals and societies.
* **explore** state, national and regional policies and **draw conclusions** about the potential impact of each.
 | **Independently, students can:*** **evaluate** the ICT policy for schooling and the impact on education.

*EG.* *Australian Government Protective Security Policy Framework*, the *Australian Government ICT Sustainability Plan 2010–2015;* the *Green Growth Policy* in Korea and the *Korean National Strategy for Sustainable Development.** Accurately **describe** the ‘terms of use’ policies on social media networks and **state** the ways in which these can support advocacy of change and protection of individuals and societies.
* **analyse** state, national and regional policies and **draw basic conclusions** about the potential impact of each.
 | **Independently, students can:*** **examine** the ICT policy for schooling and **evaluate** **in detail**, the impact on education.

*EG.* *Australian Government Protective Security Policy Framework*, the *Australian Government ICT Sustainability Plan 2010–2015;* the *Green Growth Policy* in Korea and the *Korean National Strategy for Sustainable Development.** **Analyse** the ‘terms of use’ policies on social media networks and **predict** some ways in which these can support advocacy of change and protection of individuals and societies.
* **analyse** state, national and regional policies and **draw detailed conclusions** about the potential impact of each.
 | **Independently and consistently students can:*** **examine** the ICT policy for schooling and **critically** **evaluate** the impact on education.

*EG.* *Australian Government Protective Security Policy Framework*, the *Australian Government ICT Sustainability Plan 2010–2015;* the *Green Growth Policy* in Korea and the *Korean National Strategy for Sustainable Development.** **review** and **analyse** the ‘terms of use’ policies on social media networks and **predict** ways in which these can support advocacy of change and protection of individuals and societies.
* **review** state, national and regional policies and **analyse** the potential impact of each and **predict** the effect of these policies on instruction in the classroom.
 |
|  | They share and collaborate online, establishing protocols for the use, transmission and maintenance of data and projects. |
| **PROCESSES AND PRODUCTION SKILLS** | Create interactive solutions for sharing ideas/ information online, taking into account safety, social contexts and legal responsibilities[(ACTDIP043)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP043) | With explicit prompts, whilst sharing and collaborating online, students can:* **create** aspects of a web-based project that **demonstrates** basic understanding of enterprising opportunities and show complies with accessibility requirements with support.

*EG. Using fragments of a web language to create dynamic content that supports interactivity.** **explore** online solutions for working with others by to support project work including protocols for the use, transmission and maintenance of data and projects.
 | With prompts, whilst sharing and collaborating online, students can: * **create** a web-based project that demonstrated understanding of enterprising opportunities and show complies with accessibility requirements.

*EG. Using fragments of a web language to create dynamic content that supports interactivity.** **explore** online interactive solutions for working with others to support project work including protocols for the use, transmission and maintenance of data and projects.
 | Independently, whilst sharing and collaborating online, students can:* **create** an interactive web-based project that illustrates understanding of enterprising opportunities and show complies with accessibility requirements.

 *EG. Using fragments of a web language to create dynamic content that supports interactivity.** **develop** online interactive solutions for working with others by combining or modifying online software tools to support project work including protocols for the use, transmission and maintenance of data and projects..
 | Independently, whilst sharing and collaborating online, students can:* **create** an interactive web-based project that provides enterprising opportunities and complies with accessibility requirements.

*EG. Using fragments of a web language to create dynamic content that supports interactivity.** **create** online interactive solutions for working with others by combining or modifying online software tools to support project work including protocols for the use, transmission and maintenance of data and projects
 | Independently and consistently, whilst sharing and collaborating online, students can:* **create** and evaluate, an interactive web-based project that provides enterprising opportunities and complies with accessibility requirements.

*EG. Using fragments of a web language to create dynamic content that supports interactivity.** **create** and **evaluate** online interactive solutions for working with others by combining or modifying online software tools to support project work including protocols for the use, transmission and maintenance of data and projects.
 |
|  | Students plan and manage digital projects using an iterative approach. |
| **PROCESSES AND PRODUCTION SKILLS** | Plan and manage projects using an iterative and collaborative approach, identifying risks and considering safety and sustainability [(ACTDIP044)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP044) | **With explicit prompts, students can:*** **investigate** and **show basic** **understanding** of indicators of economic success.

*EG. The capacity to scale up an innovative solution to meet the demands of a mass market and the savings accrued through sustainable practices.** **investigate** and **describe** some ideas about major ca**uses** of threats to data.

*EG. Human actions such as losing a storage device, disclosing passwords, theft and fraud.*  | **With prompts, students can:** * **Investigate** and **show basic understanding** of indicators of economic success.

*EG. The capacity to scale up an innovative solution to meet the demands of a mass market and the savings accrued through sustainable practices.** **investigate** and **describe** ideas about major ca**u**ses of threats to data.

*EG. Human actions such as losing a storage device, disclosing passwords, theft and fraud.* | **Independently, students can:*** **investigate** and **draw** some **conclusions** about indicators of economic success.

*EG. The capacity to scale up an innovative solution to meet the demands of a mass market and the savings accrued through sustainable practices*.* **investigate** and **explain** ideas about major ca**uses** of threats to data.

*EG. Human actions such as losing a storage device, disclosing passwords, theft and fraud*. | **Independently, students can:** * **Investigate** and **draw detailed conclusions** about indicators of economic success.

*EG. The capacity to scale up an innovative solution to meet the demands of a mass market and the savings accrued through sustainable practices.** **Investigate** and **discusses** ideas about major ca**uses** of threats to data.

*EG. Human actions such as losing a storage device, disclosing passwords, theft and fraud.* | **Independently and consistently students can:*** **Investigate** and **evaluate** indicators of economic success.

*EG. The capacity to scale up an innovative solution to meet the demands of a mass market and the savings accrued through sustainable practices.** **Investigates** and **draws conclusions** about major ca**uses** of threats to data.

*EG. Human actions such as losing a storage device, disclosing passwords, theft and fraud.* |