Digital Technologies Progression Points: Year 2 – 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 2**

| **Strands 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 2, students identify how common digital systems (hardware and software) are used to meet specific purposes. They use digital systems to represent simple patterns in data in different ways.  Students design solutions to simple problems using a sequence of steps and decisions. They collect familiar data and display them to convey meaning. They create and organise ideas and information using information systems, and share information in safe online environments. | | | | | | |
| **Content Descriptions** | | Students [identify](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Identify) how common digital systems (hardware and software) are used to meet specific purposes. | | | | |
| **KNOWLEDGE AND UNDERSTANDING** | Recognise and explore digital systems (hardware and software [components](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=components)) for a purpose [(ACTDIK001)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIK001) | **With explicit prompts, students can:**   * **identify** the purpose of saving to a school’s network drive.   *EG. with adult assistance, student describes why saving documents in a central location is important*   * **recognise** the process for using a digital system.   *EG. Student recognises the process for how to print*   * **manipulate** text and numbers.   *EG. Teacher assists student with step by step instructions to input information in MS Excel and create a bar graph or to use video editing software to modify sections of a video*  In familiar contexts, and with support, students can:   * **state** how hardware and software components have different functions and can work with each other.   *EG. Teacher assists students with step by step instructions while they place a sound file into a MS PowerPoint document to play* | **With prompts, students can:**   * **identify** the purpose of saving to a school’s network drive.   *EG. With others, student identifies steps to save to a class directory*   * **explore** the process for using a digital system.   *EG. Student recognises and explores the processes for how to upload/move/share or print*   * **manipulate** text and numbers.   *EG. Teacher gives some reminders to assist student to input information in MS Excel and create a bar graph. With others, student is assisted to use video editing software to modify sections of a video*  In familiar contexts, students can:   * **state** how hardware and software components have different functions and can work with each other.   *EG. Teacher assists student while they place a sound file into a MS PowerPoint document to play* | **Independently, students can:**   * **identify** the purpose of saving to a school’s network drive.   *EG. Can describe or show how to save to a class directory with correct name ie Jim History Term 2.docx*   * **demonstrate** the process for using a digital system.   *EG. Student uploads/moves/shares or prints a school picture of themselves for their family*  In familiar contexts, students can:   * **define** how hardware and software components have different functions and can work with each other.   *EG. Student places a sound file into a MS PowerPoint document to play* | **Independently, students can:**   * **explain** the purpose and illustrate how to save to a school’s network drive.   *EG. Student creates a document and save to class directory with correct name ie Jim History Term 2.docx and can explain the process*   * **explain** and **illustrate** how to upload/move/share and print.   *EG. Student shares an item and places it in a special folder, or learning management system and can explain the process*   * **manipulate** text and numbers.   *EG. Student inputs information in MS Excel and create a bar graph and can explain the process*   * **identify** the purpose and **demonstrate** the effective use of software to manipulate videos.   *EG. Student uses video editing software to modify sections of a video and can explain the process*  In familiar contexts, students can:   * **describe**, with explanation, how hardware and software components have different functions and can work with each other.   *EG. Student places a sound file into a MS PowerPoint document to play and can explain the process* | **Independently and consistently, students can:**   * **explain** the purpose and illustrate how to save to a school’s network drive efficiently.   *EG. Student creates a word document and save to class directory with correct name ie Jim History Term 2.docx and can explain the process and purpose of task in detail*   * **explain** and **illustrate** how to upload/move/share and print to a network, OneNote, Moodle.   *EG. Student shares an item and places it in a special folder, or learning management system and can explain the process and purpose of task in detail*   * **manipulate** text and numbers.   *EG. Student inputs information in MS Excel and create an unfamiliar graph and can explain the process and purpose of task in detail*   * **explain** and **identify** the purpose and effectively and efficiently demonstrate the use of software to manipulate videos.   *EG. Student uses video editing software to modify sections of a video and can explain the process and purpose of task in detail*  In unfamiliar contexts students can:   * **describe**, **explain** and **demonstrate** how hardware and software components have different functions and can work with each other.   *EG. Student places a sound (or other unfamiliar) file into a MS PowerPoint document to play and can explain the process and purpose of the task in detail* |
|  | | Students use digital systems to [represent](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Represent) simple patterns in data in different ways. | | | | |
| **KNOWLEDGE AND UNDERSTANDING** | Recognise and explore patterns in [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) and represent [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) as pictures, symbols and diagrams [(ACTDIK002)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIK002) | **With explicit prompts, students can:**   * **sort** data into groups with images.   *EG. Students are assisted to create a picture graph*   * **experiment** using digital systems to represent patterns and **recognise** that digital systems can be used to represent patterns in different ways.   *EG. With the teacher, students create a class birthday chart using symbols*   * **state** alternative ways of representing information using colours or yes/no for communicating meaning.   *EG. Music patterns, visual patterns with tiles and Yes/No guessing games*   * **identify** examples of how data can represent images*.*   *EG. Identify Pixels as the parts that make up a digital image.* | **With prompts, students can:**   * **sort** data into groups with images and text.   *EG. Students are assisted to create a table in Word to tally how students got to school*   * **experiment** using digital systems to represent patterns and **recognise** that digital systems can be used to represent patterns in different ways.   *EG. With the teacher, students create a class birthday chart using symbols and can explain in simple terms what the symbols represent*   * **state** and **produce** simple, alternative ways of representing information using colours or yes/no for communicating meaning.   *EG. Music patterns, visual patterns with tiles and Yes/No guessing games*   * **identify** and **explore** how data can represent images and understand the more pixels the more detail*.*   *EG. Identify Pixels as the parts that make up a digital image. Explore Pixels work using different sized grid paper with some boxes coloured in* | **Independently, students can:**   * **demonstrate** how to sort data into groups with text and numbers.   *EG. Students create a table in Word to tally how the class got to school and identify patterns in the data*   * **experiment** using digital systems to represent patterns and **explain** how digital systems can be used to represent patterns in different ways.   *EG. Students create a class birthday chart using symbols*   * **create** alternative ways of representing information using colours or yes/no for communicating meaning.   *EG. Music patterns, visual patterns with tiles and Yes/No guessing games*   * **recognise**, **explore** and give a simple explanation for pixels determining image quality   *EG. Explain how Pixels work using different sized grid paper with some boxes coloured in one colour to reveal an image, ie. their name* | **Independently, students can:**   * **explain** and **demonstrate** sorting data into groups with text and numbers.   *EG. Students create a table in Word to tally how the class got to school and identify patterns in the data and can explain how to create a table to others*   * **identify** and **use** digital systems to represent patterns and **explain** how digital systems can be used to represent patterns in different ways.   *EG. Students identify digital patterns using symbols and create their own and explain it*   * **investigate** and **create** alternative ways of representing information using colours or yes/no for communicating meaning.   *EG. Music patterns, visual patterns with tiles and Yes/No guessing games*, *Stop Go traffic lights. Using a kettle – light on when it is heating water/light off when it has finished.*   * **recognise**, **explore** and **explain**, with increased detail and use of examples, that data can represent images and that the more pixels the more detail*.*   *EG. Explain to peers how Pixels work* | **Independently and consistently, students can**:   * **sort** data into groups with numbers.   *EG. Students create a table in Word to tally how the class got to school and identify patterns in the data and can explain how to create a table to others*   * **identify** and **explore** digital systems to represent patterns in different ways and **investigate** how digital systems can be used to represent patterns in different ways.   *EG. Students identify digital patterns using symbols and create their own and explain it. They describe more complicated patterns and use of symbols*   * **create**, **compare** and **contrast** alternative ways of representing information using colours or yes/no for communicating meaning.   *EG. Music patterns, visual patterns with tiles and Yes/No guessing games*, *Stop Go traffic lights. Using a kettle – light on when it is heating water/light off when it has finished*   * **Explore, justify** and **demonstrate** that data can represent images and understand and explain in detail the purpose and role of pixels in creating detail*.*   *EG. Explain to peers how Pixels work and use historical and current examples* |
|  | | Students [design](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Design) solutions to simple problems using a [sequence](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Sequence) of steps and decisions. | | | | |
| **PROCESSES AND PRODUCTION SKILLS** | Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems [(ACTDIP004)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP004) | **With explicit prompts, students can:**   * **list** steps and decisions to control an object or robotic device in a simple manner.   *EG. Teacher gives detailed instructions for student to program steps move a robot forward for a set time*  **In familiar contexts, with support, students can:**   * **produce** simple instructions using text and pictures.   *EG. Create a list of chores to get ready for school i.e. brush teeth*   * **recognise** a sequence of instructions.   *EG. retell the steps of a traffic light system* | **With prompts, students can:**   * **create** steps and decisions to control an object or robotic device to move in a described way.   *EG. Teacher gives instructions for student to program steps to move a robot forward for time, turn around and return*  **In familiar contexts, with minimal support, students can:**   * **produce** detailed instructions using text and/or pictures.   *EG. Create a list of chores to get ready for school involving detail within steps i.e. Brush teeth “with tooth paste”*   * **recognise** a sequence of instructions.   *EG. explain the steps of a traffic light system* | **Independently, students can:**   * **create** steps and decisions to control an object or robotic device to move in a described way.   *EG. Teacher gives task for student to program steps to move a robot forward to a line, turn around and return*  **In familiar contexts, students can:**   * **create** instructions using text and pictures and **compare** to peer’s.   *EG. Creates a list of chores to get ready for school involving detail within steps and compares work with peers*   * **identify** a sequence of instructions.   *EG. examine and deconstruct the steps of a traffic light system* | **Independently, students can:**   * **create** steps and decisions to control an object or robotic device to move in a desired way.   *EG. Student programs steps to move a robot forward to a line, pause for animal crossing and continue forward*  **In familiar contexts, students can:**   * **create** detailed instructions using text and pictures and **compare** to peer’s.   *EG. Create a list of chores to get ready for school involving detail within steps and prioritising steps that should be completed before others i.e. eat breakfast-> brush teeth*   * **analyse** and **explain** a sequence of instructions.   *EG. examine and deconstruct the steps of a traffic light system discussing details of the sequence of steps i.e. the traffic light must stay red while pedestrians cross* | **Independently and consistently, students can:**   * **create** steps and decisions to control an object or robotic device to move in a desired way and make modifications to steps when errors occur.   *EG. Student programs steps to move a robot forward to a line, pause for animal crossing and continue forward. If pause is too long, student can rectify this*  **In familiar and new contexts, students can:**   * **create** detailed instructions using text and pictures and **compare** to peer’s, with detailed justification.   *EG. Create a list of chores to get ready for school prioritising steps that should be completed before others and predicting events that could affect time details i.e. 1min to brush teeth, 2mins if sharing sink with sibling*   * **analyse** and **explain in detail** a sequence of instructions and **identify** issues with the sequence.   *EG. examine and deconstruct the steps of a traffic light system discussing details of the sequence of steps i.e. the traffic light must stay red while pedestrians cross. Predict what may occur if there is more traffic than normal* |
|  |  | Students collect familiar data and display them to convey meaning. | | | | |
| **PROCESSES AND PRODUCTION SKILLS** | Collect, explore and sort [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data), and use digital systems to present the [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) creatively [(ACTDIP003)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP003) | **With explicit prompts, students can:**   * **identify** image or text as data.   *EG. MS PowerPoint*   * **illustrate** information creatively.   *EG. With teacher guidance, use slideshows, picture graphs, posters and word art. Create a class bar graph or picture graph of favourite toys*   * **produce** a simple, digital mind map of provided or familiar, collected data*.*   **In familiar contexts, and with support, students can:**   * **explain** the importance of presenting data creatively. | **With prompts, students can:**   * **collect, identify** and **illustrate** image or text as data.   *EG. MS PowerPoint*   * **illustrate** information creatively.   *EG. With others, use slideshows, picture graphs, posters and word art. Create a class bar graph or picture graph of favourite toys*   * **produce** a digital mind map to organise collected data, with simple image and text.   **In familiar contexts, with minimal support, students can:**   * **explain** the importance of presenting data creatively. | **Independently, students can:**   * **collect, identify** and **illustrate** image or text as data.   *EG. MS PowerPoint*   * **illustrate** information creatively.   *EG. Use slideshows, picture graphs, posters and word art. Create a class bar graph or picture graph of favourite toys*   * **create** a digital mind map to organise and convey meaning of collected data, with creative image, text and presentation choices.   **In familiar contexts, students can:**   * **explain** the importance of presenting data creatively to convey meaning. | **Independently, students can:**   * **collect, identify** and **illustrate** image and text as data, with explanation.   *EG. MS PowerPoint*   * **illustrate** information using graphs, appropriate to data.   *EG. Use Excel and choose different types of graphs to represent different meanings*  **Create** a digital, multi-level mind map to organise and improve meaning of collected data, with imaginative image, text and presentation choices.  **In familiar contexts, students can:**   * **explain** the importance of organising and presenting data creatively to convey meaning. | **Independently and consistently, students can:**   * **collect, identify** and **illustrate** image and text as data with clear explanation of purpose.   *EG. MS PowerPoint*   * **illustrate** information using graphs, compare a variety of displays appropriate to data, and explain choice.   *EG. Use Excel and choose different types of graphs to represent different meanings*   * **create** a digital, multi-level mind map to organise and improve meaning of new and collected data, showing relationships among pieces and using advanced text, image and presentation choices.   **In new and familiar contexts, students can:**   * **explain** the importance of organising and presenting data creatively to convey meaning. |
|  |  | Students create and [organise](http://www.australiancurriculum.edu.au/glossary/popup?a=F10AS&t=Organise) ideas and information using information systems, and share information in safe online environments. | | | | |
| **PROCESSES AND PRODUCTION SKILLS** | Explore how people safely use common information systems to meet information, communication and recreation needs [(ACTDIP005)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP005)  Create and organise ideas and information using information systems independently and with others, and share these with known people in safe online environments [(ACTDIP006)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP006) | **With explicit prompts, students can:**   * **state** the importance of Cyber Safety and share related examples, ie: password sharing, posting photos, online chats.   *EG. Contributes to class protocols about Cyber Safety*   * **state** a way that information systems can aid people, ie: With disabilities – text to speech software/vibration door bells/touchscreens / For families – social media for distance, skype, play (difference to past)*.*   *EG. Mystery skype or skype class at another school*   * **explore** the need for safe ergonomic practices for technology use. * **explore** different types of data to share online. * Make ethical decisions while online with other people’s data. * **state** when it is appropriate to use others work. * **identify** safe forms of online interactions. | **With prompts, student can:**   * **explain** the importance of Cyber Safety and, with prompts, share related examples, ie: password sharing, posting photos, online chats.   *EG. Contributes to class protocols about Cyber Safety*   * **represent** how information systems can aid people, ie: With disabilities – text to speech software/vibration door bells/touchscreens / For families – social media for distance, skype, play (difference to past)*.*   *EG. Mystery skype or skype class at another school*   * **explore** the need for safe ergonomic practices for technology use. * **explore** different types of data to share online. * Make ethical decisions while online, with other people’s data. * **state** when it is appropriate to use others work. * **identify** safe forms of online interactions. | **Independently, students can:**   * **explain,** in basic terms**,** the importance of Cyber Safety and related examples, ie: password sharing, posting photos, online chats.   *EG. Contributes to class protocols about Cyber Safety*   * **illustrate** how information systems can aid people, ie: With disabilities – text to speech software/vibration door bells/touchscreens / For families – social media for distance, skype, play (difference to past)*.*   *EG. Mystery skype or skype class at another school*   * **describe correctly** the need for safe ergonomic practices for technology use. * **explore** different types of data to share online. * Make ethical decisions while online with other people’s data. * **describe correctly** when it is appropriate to use others work. * **identify** and **describe** safe forms of online interactions, providing a familiar example. | **Independently, students can:**  * **explain** the importance of Cyber Safety and outline specific examples and procedures, ie: password sharing, posting photos, online chats.   *EG. Creates class protocols about Cyber Safety for a variety of tools, including social media*   * **investigate** and **discuss** how information systems can aid people for communication, information and recreation and compare past to present systems, illustrating ideas about the ways IT systems have changed overtime, ie: With disabilities – text to speech software/vibration door bells/touchscreens / For families – social media for distance, skype, play (difference to past)*.*   *EG. Mystery skype or skype class at another school*   * **discuss** and **demonstrate** the need for safe ergonomic practices for technology use. * **investigate** different types of data to share online. * Make ethical decisions while online with other people’s data. * **compare** and **contrast** when it is appropriate to use others work. * **identify** and **describe** safe forms of online interactions, providing familiar examples. | **Independently and consistently, students can:**   * **explain** and **justify** the importance of Cyber Safety and detail various, specific examples and procedures, ie: password sharing, posting photos, online chats.   *EG. Creates school and home protocols about Cyber Safety for a variety of tools, including social media*   * **investigate** and **discuss** how information systems can aid people for communication, information and recreation and compare past to present systems, illustrating ideas about the ways IT systems have changed overtime, ie: With disabilities – text to speech software/vibration door bells/touchscreens / For families – social media for distance, skype, play (difference to past)*.*   *EG. Mystery skype or skype class at another school*   * **discuss** and **demonstrate** the need for safe ergonomic practices for technology use. * **investigate** different types of data to share online. * Make ethical decisions while online with other people’s data. * **compare** and **contras**t when it is appropriate to use others work, with examples. * **identify** and **describe** safe forms of online interactions, providing unfamiliar examples. |