Digital Technologies Progression Points: Prep 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 – Prep**

| **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:**   * **recognise** a tool to take photographs and make video recording.   *EG. Phone vs web cam vs SLR camera*   * **describe** how to save files.   *EG. printout hard copy, file and label ~ if no technology platform*   * **state** how to manipulate images.   EG. *use MS paint*   * **state** input devices suitability to different purposes.   EG. *when do you use a mouse, a stylus, etc.*  *(Input device =* puts information into a computer)  **In familiar contexts, with support, student can:**   * **identify** how digital systems follow instructions (computers use programs to do anything\*\*).   *Eg.Beebots and directions*   * **identify** features of a device (parts of a digital system).   *EG. play “I Spy” with technology images* | **With prompts, student can:**   * **recognise** a tool to take photographs and make video recording.   *EG. Phone vs web cam vs SLR camera*   * **describe** how to save files.   *EG. printout hard copy, file and label ~ if no technology platform*   * **state** how to manipulate/modify images.   EG. *use MS paint*   * **state** input devices suitability to different purposes.   *EG. when do you use a mouse, a stylus, etc.*  *(Input device =* puts information into a computer)  **In familiar contexts, with some support, student can:**   * **state** how digital systems follow instructions.   *EG. Beebots and directions*   * **identify** features of a device (parts of a digital system).   *EG. play “I Spy” with technology images* | **Independently, students can:**   * **identify** a tool to take photographs and make video recording.   *EG. Phone vs web cam vs SLR camera*   * **describe** how to save files.   *EG. printout hard copy, file and label ~ if no technology platform*   * **explain in basic terms** how to manipulate/modify images.   *EG. use MS paint*   * **discuss** input devices suitability to different purposes.   *EG. when do you use a mouse, a stylus, etc.*  *(Input device =* puts information into a computer)  **In familiar contexts:**   * **explain in basic terms** how digital systems follow instructions.   *EG. Beebots and directions*   * **identify** features of a device (parts of a digital system).   *EG. play “I Spy” with technology images* | **Independently, students can:**   * **Identify** and **describe** a tool to take photographs and make video recording.   *EG. Phone vs web cam vs SLR camera*   * **explain** how to save files.   *EG. printout hard copy, file and label ~ if no technology platform*   * **explain** how to manipulate/modify images   EG. *use MS paint*   * **discuss** and **compare** input devices suitability to different purposes.   EG. *when do you use a mouse versus a stylus, etc.*  *(Input device =* puts information into a computer)  **In familiar contexts:**   * **explain** how digital systems follow instructions.   *EG. Beebots and directions*   * **identify** and **explain** features of a device (parts of a digital system).   *EG. play “I Spy” with technology images* | **Independently and consistently, students can:**   * **identify** and **describe in detail** a tool to take photographs and make video recording.   *EG. Phone vs web cam vs SLR camera*   * **explain in detail** how to save files.   *EG. printout hard copy, file and label ~ if no technology platform*   * **explain in detail** how to manipulate/modify images.   *EG. use MS paint*   * **compare** and **justify** input devices suitability to different purposes.   *EG. when do you use a mouse, a stylus, etc.*  *(Input device =* puts information into a computer)  **In familiar and new contexts:**   * **explain in detail** how digital systems follow instructions.   *EG. Beebots and directions*   * **identify** and **explain in detail** features of a device (parts of a digital system).   *EG. play “I Spy” with technology images* |
|  | | 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** simple, collected data.   *EG. take photos of a school excursion and create a presentation on it*  *(Data = letters, numbers, images and symbols)*   * **explore** with patterns, using images and materials.   *EG. Create wooden construction item from template*   * **state** how representing data in different ways/patterns can change its purpose in digital systems.   *EG. how the same 3 numbers in a different order represents a different number*, *change the channel on the TV ie. 023 is not the same as 032* | **With prompts, students can:**   * sort simple, collected data for a purpose.   *EG. take photos of a school excursion and create a presentation on it*  *(Data= letters, numbers, images and symbols)*   * **explore** with patterns, using images and materials.   *EG. Create wooden construction item from template*   * **identify** how representing data in different ways/patterns can change its purpose in digital systems.   *EG. how the same 3 numbers in a different order represents a different number*, *change the channel on the TV ie. 023 is not the same as 032* | **Independently, students can:**   * **sort** simple, collected data for a purpose.   *EG. take photos of a school excursion and create a presentation on it*  *(Data=letters, numbers, images and symbols)*   * **explore** with patterns, using images and materials.   *EG. Create wooden construction item from template*   * **Explain in basic terms** how representing data in different ways/patterns can change its purpose in digital systems.   *EG. how the same 3 numbers in a different order represents a different number*, *change the channel on the TV ie. 023 is not the same as 032* | **Independently, students can:**   * sort collected data for a purpose, with explanation.   *EG. take photos of a school excursion and create a presentation on it*  *(Data= letters, numbers, images and symbols)*   * Experiment with patterns, using images and materials.   *EG. Create wooden construction item from template.*   * **explain** how representing data in different ways/patterns can change its purpose in digital systems.   *EG. how the same 3 numbers in a different order represents a different number*, *change the channel on the TV ie. 023 is not the same as 032* | **Independently and consistently, students can:**   * sort various data examples for a purpose, with detailed explanation.   *EG. take photos of a school excursion and create a presentation on it*  *(Data= letters, numbers, images and symbols)*   * Experiment with patterns, using images and materials.   *EG. Create wooden construction item from template*   * **Explain in detail** how representing data in different ways/patterns can change its purpose in digital systems.   *EG. how the same 3 numbers in a different order represents a different number*, *change the channel on the TV ie. 023 is not the same as 032* |
|  | | 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:**   * **Demonstrate** steps in a familiar sequence   *EG. Preparing for class, or attending assembly*   * **Follow** a sequence of steps to conclusion   *EG. An obstacle course*   * With others, **follow** a representation ofsteps and decisions ina sequence with symbols or pictures   *EG. An orange spot means jump on the spot in an obstacle course, a green square means spin* | **With prompts, students can:**   * **Identify** steps in a familiar sequence   *EG. Preparing for class, or attending assembly*   * **Follow** a sequence of steps to conclusion and identify the steps   *EG. An obstacle course*   * With others, **identify** and **follow** representations ofsteps and decisions ina sequence   *EG. An orange spot means jump on the spot in an obstacle course, a green square means spin* | **Independently, students can:**   * **Order** steps in a familiar sequence   *EG. Preparing for class, or attending assembly*   * **Follow** a sequence of steps to conclusion and describe the steps   *EG. An obstacle course*   * **Represent** twosteps and decisions ina sequence with symbols or pictures   *EG. An orange spot means jump on the spot in an obstacle course, a green square means spin* | **Independently, students can:**   * **Create** a series ofsteps for a familiar sequence   *EG. Preparing for class, or attending assembly*   * **Follow** a sequence of steps to conclusion and explain the steps to others   *EG. An obstacle course*   * **Represent** somesteps and decisions ina sequence with symbols or pictures   *EG. An orange spot means jump on the spot in an obstacle course, a green square means spin* | **Independently and consistently, students can:**   * **Create** and **explain** a series ofsteps in sequence from new context   *EG. Making a phone call*   * **Represent** all steps and decisions ina sequence with symbols or pictures   *EG. An orange spot means jump on the spot in an obstacle course, a green square means spin* |
|  | | 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** visual data ie. search through digital photo library.   *EG. use tessellation software*   * **explore** the collection and sorting of data/information through play.   *EG. sort wooden blocks when packing up games corner into correct locations* | **With prompts, student can:**   * **identify** visual data ie. search through digital photo library.   *EG. use tessellation software*   * **explore** the collection and sorting of data/information through play.   *EG. sort wooden blocks when packing up games corner into correct locations* | **Independently, students can**:   * **identify** and **discuss in basic terms** visual data ie. search through digital photo library.   *EG. use tessellation software*   * **explore** and **discuss in basic terms** the collection and sorting of data/information through play.   *EG. sort wooden blocks when packing up games corner into correct locations* | **Independently, students can:**   * **identify** and **discuss** visual data ie. search through digital photo library.   *EG. use tessellation software*   * **explore** and **discuss** the collection and sorting of data/information through play.   *EG. sort wooden blocks when packing up games corner into correct locations* | **Independently and consistently, students can:**   * **identify** and **discuss in detail** visual data ie. search through digital photo library.   *EG. Create wooden construction item from template- Melissa and Doug pattern blocks and design templates to fill*   * **explore** and **discuss in detail** the collection and sorting of data/information through play.   *EG. sort wooden blocks when packing up games corner into correct locations* |
|  |  | 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:** **list** ways that computers can be used for communications.*EG. Email, webinar, mobile phones, text messages*  * **state** who to share photos and videos with.   *EG. Where and who to share information with Dad, Mum, random people?*   * **identify** what is a safe online environment   *EG. Use of passwords, knowing who you are communicating with, playing games with strangers* | **With prompts, students can:** **describe** ways that computers can be used for communications.*EG. Email, webinar, mobile phones, text messages*  * **state** who to share photos and videos with.   *EG. Where and who to share information with Dad, Mum, random people?*   * **identify** what is a safe online environment   *EG. Use of passwords, knowing who you are communicating with, playing games with strangers* | **Independently, students can:** **describe** ways that computers can be used for communications.*EG. Email, webinar, mobile phones, text messages*  * **discuss** who to share photos and videos with.   *EG. Where and who to share information with Dad, Mum, random people?*   * **identify** and **explain in basic terms** what is a safe online environment   *EG. Use of passwords, knowing who you are communicating with, playing games with strangers* | **Independently, students can:****Describe correctly** ways that computers can be used for communications.*EG. Email, webinar, mobile phones, text messages*  * **discuss, with details,** who to share photos and videos with.   *EG. Where and who to share information with Dad, Mum, random people?*   * **identify** and **explain** whatis a safe online environment   *EG. Use of passwords, knowing who you are communicating with, playing games with strangers* | **Independently and consistently, students can:** **Describe correctly,** and with details, ways that computers can be used for communications.*EG. Email, webinar, mobile phones, text messages*  * **discuss, with details and examples,** who to share photos and videos with.   *EG. Where and who to share information with Dad, Mum, random people?*   * **identify** and **explain in detail** what is a safe online environment   *EG. Use of passwords, knowing who you are communicating with, playing games with strangers* |