Information & Communication Technology

Stage One

Students encounter activities and experiences. Participation is fully prompted. They may be passive or resistant. They may show simple reflex responses. They show emerging awareness of activities and experiences. They may have periods when they appear alert and ready to focus their attention. They may give intermittent reactions.

Student:
- exposed to a range of everyday ICT equipment and activities
- shows reflex responses to visual and auditory stimulation from multimedia
- uses random movements to create images using switch technology
- coactively uses switches, Big Macs or Jellybeans to access a range of everyday multimedia and technology
- uses random movements to create sounds using switch technology

Stage Two

Students begin to respond to familiar audio and visual technology. They react to new activities and experiences. They begin to show interest in interacting with audio and visual technology. They accept and engage in coactive exploration. They communicate consistent preferences and affective responses. They recognize familiar audio and visual technology. They perform actions, often by trial and error, and they remember learned responses over short periods of time.

Student:
- responds consistently to a variety of visual stimuli from different equipment
- gives prolonged attention to image on monitor screen
- briefly tracks images moving on the screen
- coactively uses mouse or interactive white board to create a picture
- engages in coactive exploration, using switches
- performs actions by trial and error, through touching keys on keyboard
- responds to amplified sounds
- experiences using message carrying switch e.g. Big Mac
- uses voice or body movement to make sounds in a microphone
- responds consistently to a variety of audio stimuli from different equipment
- creates sounds by trial and error using technology through possible use of sensory room equipment, IWB, switches

Stage Three

Students begin to interact intentionally. They seek attention though eye contact, gestures or actions. They participate in shared activities with less support. They sustain concentration for short periods. When using

technology, they can remember learned responses and anticipate known events. They actively explore technology for short periods.

Student:

- requests interaction with ICT through eye contact, gestures or actions
- sustains visual contact with screen for short periods
- intentionally uses a touch screen to access device to initiate an activity
- maintains prolonged pressure on a switch to continue interaction with a program
- use gestures or actions to acknowledge a photograph or image of themselves
- purposefully track images as they move across a screen
- shows an awareness of the results of their actions when using a switch
- shows an awareness of the results of their actions when using a touch screen or IWB
- intentionally uses a switch to access device to initiate an activity
- makes sounds into a recording device and responds to recorded sounds
- intentionally activates a communication device like a Big Mac

Stage Four

Students know certain actions can produce predictable results and show an awareness that ICT can be used to control and explore objects. They can sustain concentration for extended periods with support.

Student:

- recognise familiar people on the screen
- sustain prolonged visual contact with screen
- point, gesture, indicate different components e.g. screen, switch, keyboard, white board, mouse, power cords
- make the connection between the action of moving the mouse to the effect through tracking the cursor
- actively interact with a program to elicit a known response through use of dials, switches, remote controls, buttons
- activate a single switch or mouse click at appropriate times to interact with a program
- record sound or voice through use of a switch or single mouse click to start and stop the recording
- exposure to modelled careful use of computers – clean hands, no touching screen, no food or drinks, no rough handling etc
- exposure to telephone and mobile phone as a means of communication
- exposure to viewing self through video conferencing equipment

Stage Five

Students operate simple software and show an understanding of everyday technology. They make connections between switches, keyboards and the mouse on computer screens. They recognise familiar icons or symbols to indicate a preference.

Student:

- recognises familiar icons on the screen

- recognises favourite characters within a familiar website
- safely connects headphones and mouse with assistance
- press 'ON' button independently to start computer
- relates a printout to own work on computer
- creates a simple picture using a multimedia program
- purposefully use switch or mouse clicks to maintain interaction with a program
- knows pressing letters on keyboard makes letters appear on the screen
- demonstrate click and drag skills on interactive white boards
- knows to ask for permission to use computer
- knows that the receiver of a ringing telephone needs to be picked up

Stage Six

Students use ICT as a communication tool. They may use a variety of access devices to create and present their ideas. They respond to simple instructions to control a device and may operate some devices independently.

Student:
- take photos with assistance
- recognises familiar website
- able to *print* from icon with support
- safely connects power cords, headphones and mouse
- with assistance, log on to computer
- uses tools within a multimedia program to create a design using different colours, lines sizes and effects
- move the cursor to a specific icon using the mouse.
- double click the mouse to open programs with assistance
- uses keyboard to copy their first name or relevant word related to them
- single click the mouse to *close* programs
- use *scroll bar* arrow (up/down) buttons
- operates an audio device with assistance
- put CD/DVD into appropriate player
- is able to discuss safe use of equipment
- picks up receiver of a ringing phone, say 'hello' if possible and hand to an adult
- picks up ringing mobile phone and hands to adult

Stage Seven

Students can follow instructions to store and print information. With minimal assistance they are increasing their technical skills in using access, devices and audio/visual hardware and software.

Student:
- able to use *Quick print* from *Quick Launch toolbar* with assistance
- *save* work with assistance
- responds to visual screen prompts when using relevant software programs with assistance
- shut down computer with assistance

- navigate through a website with help
- explore (integrated) laptop camera
- independently take photographs with digital camera
- able to highlight a letter, word, block of text or image
- move the cursor to a specific icon using the mouse.
- double click the mouse to open programs with minimal assistance
- use mouse click/hold to move scroll bar
- use arrow keys with assistance
- operates an audio device with minimal assistance
- picks up ringing mobile phone and attempts to answer
- engages in a video conference call, under supervision

Stage Eight

Students use ICT to communicate and present their ideas. They are extending their capacity to manipulate keyboard and mouse. They should be able to use the basic functions of a digital camera. They can produce work by inserting graphics and can print documents independently.

Student:

- prints work using tool bar
- saves work to own folder with assistance
- follow visual screen prompts within a program
- highlight item and hold down the mouse button to drag and drop
- explore websites to collect information with assistance
- explore location of different drives with assistance
- choose and select picture within website (with assistance to type the search word)
- take photos using integrated laptop camera independently
- using the play buttons on the digital camera to review photos taken
- is able to delete images from digital camera
- use shift key for capital letters with minimal assistance
- use enter to start a new line with minimal assistance
- use a space bar to put spaces between words with minimal assistance
- identify different buttons on a DVD/video player/TV/IWB remotes
- able to position cursor correctly using mouse or arrow keys
- copy a simple sentence
- play audio using appropriate player
- experiments with audio programs e.g.. Button Beats
- knows to ask for assistance when using the internet and additional information is requested, e.g.. name/age etc

Stage Nine

Students are beginning to explore a range of tools to communicate. They are learning more about the Internet and its uses. They are expanding their use of different functions within software systems. They are becoming more independent in saving, retrieving and printing.

Student:

- retrieves and *opens* files from folder with assistance
- saves work to own folder independently, using '*Save As*'
- select image from file and print, with assistance to choose *print options* such as printer, number of copies, selected page
- use search engines with assistance
- independently locate different drives
- select and *insert picture* from photo gallery (with assistance to find folder)
- *resize (*enlarge and reduce) image
- move and rotate image
- using Drawing tools, select and *insert shapes*, use *fill* and *line colour* functions
- be exposed to video recording using a digital camera
- understand functions of and use backspace and delete keys with assistance
- use shift key to type the upper of 2 symbols of a given key E.G.. *,?, @ "
- independently operates different buttons on a DVD/video player/TV/IWB remotes
- use 'Undo Typing' or 'Repeat Typing' functions
- explore changing *font size*, *colour* and *font style* with assistance
- exposure to touch typing programs
- can *copy* and *paste* or *cut* an image or text with assistance
- able to underline, use bold or italic functions
- record voice with audio device
- knows not to access others' folders
- shows an awareness that not all information found on the internet is true or accurate
- be exposed to use of email/text messaging
- make a telephone call from a telephone with assistance

Stage Ten

Students are confident in searching the internet and are being introduced to communication through email/text messaging. They are more familiar with the features of a keyboard and familiar software programs. They are exploring short cut keys that enable them to perform a function within a software program. They are independently managing folders within the networked environment.

Student:

- retrieves files from folder independently
- select image from file and print, independently choosing print options
- use search engines independently
- saves to external device e.g.. USB and be able to remove device safely
- log on to Intranet
- *justify* text or image

- select page *orientation* to suit document
- make a video recording with support
- understand functions of and use backspace and delete keys
- exposure to short cut functions (see additional resources)
- explore *text alignment*
- insert *text box* with assistance
- explore touch typing programs
- can make appropriate choices when searching for website
- exposure to discussions on appropriate messaging and email content (cyberbullying)
- observes the process of writing email /text messaging as a form of communication
- make a telephone call independently
- make a call from a mobile phone with assistance

Stage Eleven

Students are becoming more confident in using the internet. They are exploring additional features of programs which can enhance the presentation of their work. Greater awareness of cybersafety issues are being explored with specific focus being placed on personal safety.

Student:

- type known web address into address bar
- delete documents from folder or USB
- access Intranet with assistance
- use *callouts*
- insert a *text box* and be able to select text direction
- use *text wrapping*
- independently make a video recording
- explore short cut functions with assistance
- explores *right click* functions of mouse
- use *spell check* function through toolbar (ribbon) or *automatic spell check* (right click function)
- record music e.g.. Button Beats, Audacity
- is able to explain that there are certain photographs /video which should not be taken (of strangers, in private situations)
- contributes to the process of writing email /text message as a form of communication
- exposure to Wikis and Blogs
- independently makes a phone call on a mobile

Stage Twelve

Students are exploring features in diagrams and tables. They have acquired a range of skills which allow them to manipulate presentations more easily. They are exploring additional hardware and forms of communication. Issues relating to cyberbullying and a greater awareness of personal safety when using the internet are discussed.

Student:

- use scanner with assistance

- access Intranet independently
- insert *diagrams* (Smart Art)
- use *page borders and shading*
- insert *table* into a document and be able to insert or delete columns and rows
- insert *bullets*
- independently use some short cut functions
- independently use *Find*, *Replace,* and *Select* functions
- can indicate difference between columns and rows
- use and add files to mp3 player with assistance
- is able to discuss appropriate messaging and email content (bullying/language)
- shows an understanding that messages/images are permanent and can be distributed further
- show an awareness of the importance of personally knowing the people on your friends list
- send internal email independently
- explore Wikis and Blogs with assistance
- exposure to social networking sites -www.livewire.org.au

Stage Thirteen

Students are becoming independent in their ability to use a range of software programs to express their ideas and present their thinking. They are exploring more advanced communication avenues including wikis, blogs, podcasts and social networking sites. In conjunction with this they are expanding their awareness of cyber safety.

Student:

- use scanner independently
- is able to insert *chart* and modify the data
- select *page margins* to suit document
- be able to set and adjust *line* and *paragraph spacing* and *indents*
- independently use and add files to mp3 player
- exposure to Podcasts
- shows understanding of photographs appropriate for uploading
- shows an understanding that personal information should not be shared
- be able to log off email or social networking websites
- send email with attachment, with assistance
- independently explore Wikis and Blogs
- explore social networking sites with assistance
- independently send text message

Stage Fourteen

Students are building confidence in a range of communication modes. They are learning strategies to deal with inappropriate content of email, text messages and websites. They are able to combine a range of technical skills to create and present their ideas.

Student:

- burn CD/DVD – audio or data
- use *spreadsheets to* and enter data correctly
- can edit cells within a spreadsheet
- can add gridlines or *table borders* to spreadsheet
- can use A-Z ordering function
- use Tab key when required
- use *header/footer*
- use 'help' function to address difficulties or learn new points
- create digital portfolio e.g.. a CV or life history
- shows a combined use of technical skills to create and present their ideas
- explore Podcasts
- shows an awareness of what to do when inappropriate content or email/text message is received
- shows an understanding of firewalls and anti-virus programs
- independently send email/text message with attachment
- send external email with assistance
- independently use social networking sites

Stage Fifteen

Students are independent in their application of technology in a range of software and hardware. They show an understanding of the need to communicate safely and are exploring the use of technology in purposeful ways.

Student:
- is able to save in different *file formats* e.g. jpeg, avi, mpeg
- is able to personalize the *Quick Access Toolbar*
- insert an *embedded object*
- can create a bar, line, column or pie chart from data entered in spreadsheet
- can use built-in addition formula
- create text or graphic *hyperlink*
- shows a combined use of technical skills to create resources that can be used within the school e.g.. powerpoint stories, web pages, photo story
- create Podcasts for use in school
- is able to discuss appropriate messaging and email content depending on audience (friend, employer…)
- independently sends external email

For *italics* see – Mackay District Special School ICT Learning Community Document "Glossary of ICT Curriculum Terms"