Queensland Curriculum, Assessment and Reporting Framework

Information and Communication Technologies (ICTs)

Cross-curriculum priority by the end of *Year 7*

Students live in a technological world where information and communication technologies (ICTs) are integral to everyday situations. ICTs include the hardware, software, peripheral devices and digital systems that enable data and information to be managed, stored, processed and communicated. Students independently and collaboratively work in online and stand-alone environments across a range of learning contexts.

Students make use of the potential of a range of ICT functions and applications. They develop the knowledge, skills and capacity to select and use ICTs to inquire, develop new understandings, transform information and construct new knowledge for a specific purpose or context. They communicate with others in an ethical, safe and responsible manner. They develop understandings of the impact of ICTs on society.

Applying ICTs as a tool for learning assists students to become competent, discriminating, creative and productive users of ICTs. ICTs can be integrated in a variety of ways within and across all key learning areas to support thinking, learning, collaboration and communication.

Inquiring with ICTs

Students explore, select and use ICTs in the processes of inquiry and research across key learning areas. They:

- identify the inquiry focus, data and information requirements and possible digital information sources
- plan, conduct and manage structured searches and advanced searches for data and information in response to questions
- organise and analyse, experiment with and test data and information from a variety of sources
- evaluate data and information gathered for usefulness, credibility, relevance, accuracy and completeness
- reflect on, analyse and evaluate how ICTs have assisted in meeting the inquiry purposes and in developing new understandings.

Queensland Government
Department of **Education, Training and the Arts**

Queensland Studies Authority
Partnership and innovation

Creating with ICTs

Students experiment with, select and use ICTs to create a range of responses to suit the purpose and audience. They use ICTs to develop understanding, demonstrate creativity, thinking, learning, collaboration and communication across key learning areas. They:

- develop plans and proposals, considering common ICT design features

- develop criteria to evaluate responses, plans and processes

- express and creatively represent ideas, information and thinking

- creatively document and present their planning, thinking and learning using a combination of media

- reflect on their use of ICTs as creative tools and and evaluate the quality of their ICT responses, plans and processes against criteria.

Communicating with ICTs

Students experiment with, select and use ICTs across key learning areas to collaborate and enhance communication with individuals, groups or wider audiences in local and global contexts for an identified purpose and audience. They:

- collaborate, develop, organise and present new ideas

- consider how ICTs can be used to enhance interpersonal relationships and empathise with people in different social and cultural contexts

- apply suitable or agreed communication conventions and protocols

- select and apply a variety of digital media to improve communication

- establish their own or a group image and identity in communication

- reflect on their use of ICTs and consider feedback to improve collaboration and refine and communicate meaning.

Ethics, issues and ICTs

Students understand the role and impact of ICTs in society. They develop and apply ethical, safe and responsible practices when working with ICTs in online and stand-alone environments. They:

- apply codes of practice for safe, secure and responsible use of ICTs

- review the use of ICTs in terms of safety, ethical practice, legality and responsibility

- apply values and codes of practice of the ICT environment that respect individual rights and cultural differences when accessing and delivering information online

- apply protocols to acknowledge the owner(s)/creators(s) of digital information sources and develop an awareness of legislation relating to digital theft and plagiarism

- apply a range of preventative strategies to address issues relating to health and safety when using ICTs

- develop and apply strategies for securing and protecting digital information, including personal information

- evaluate how their use of ICTs meets ethical and legal criteria

- reflect on, analyse and evaluate the use of ICTs, assess their impact in the workplace and society, and consider future needs.

Operating ICTs

Students use a range of advanced ICT functions and applications across key learning areas to inquire, create, collaborate and communicate, and to manage information and data. They:

- develop operational skills and begin to use the extended functionality of a range of ICT devices

- investigate the main uses and processes of some input, output, processing and storage devices

- describe various ICT devices and processes using ICT-specific terminology

- apply operational conventions when using ICTs

- develop strategies for learning new ICT operations and consider different ways to perform tasks

- identify operational advantages to manage personal ICT resources and customise interfaces

- apply agreed processes for personal management of digital content and identify the advantages of customisation

- reflect on, analyse and evaluate their operational skills to meet the requirements of system resources, processes and conventions.