



# Information and Communication Technologies (ICTs)

*Cross-curriculum priority  
by the end of Year 9*

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 autonomously and routinely use 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 a range of digital information sources
- plan, conduct and refine advanced searches, and select appropriate sources of digital information in response to research questions
- classify, organise, analyse and interpret data and information from a variety of sources to respond to inquiries, or to identify new paths for inquiries
- evaluate data and information gathered for usefulness, credibility, relevance, accuracy, completeness and authenticity
- reflect on, analyse and evaluate how ICTs have assisted in addressing research questions and sub-questions for the inquiry purposes and in developing new understandings.

## 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:

- analyse and evaluate creative opportunities to apply ICTs
- develop plans for innovative and creative responses, processes and simple systems
- establish criteria to assess and select ICTs
- express and creatively represent ideas, information and thinking in innovative ways
- develop innovative and creative responses, processes and simple systems
- analyse ICT-related problems to identify process, response or system changes required to meet needs
- creatively and effectively document and present their planning, thinking and learning, using a combination of media
- reflect on the use of ICTs as creative tools and apply established criteria to evaluate ICT responses.

## Communicating with ICTs

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

- collaborate, exchange ideas, distribute information, present critical opinions, problem solve and interpret messages
- consider and apply ICTs to enhance interpersonal relationships in order to develop social and cultural understandings
- apply suitable presentation and communication conventions and protocols
- select and apply a variety of ICTs to exchange and interpret messages and meanings
- present an individual or group identity in communication
- reflect on feedback to analyse and improve their use of ICTs and to describe more effective use of ICTs in future communications.

## Ethics, issues and ICTs

Students understand the multiple roles and impacts 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 relevant to local and global environments, particularly in relation to online environments
- understand that values shape how ICTs are used
- apply codes of practice and strategies to conform to intellectual property and copyright laws
- consider individual rights and cultural expectations when accessing or creating digital information sources
- select and apply a range of preventative strategies to minimise health and safety issues
- secure and protect digital information, including personal information and recognise the specific needs of some users
- develop and maintain strategies for securing and protecting digital information
- analyse and evaluate ICT use, considering economic, social, ethical and legal perspectives
- reflect on, analyse and evaluate the current use of ICTs and predict future impacts on the workplace and society.



## Operating ICTs

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

- apply efficient operational sequences for the operation of a variety of ICTs
- apply formats and conventions when undertaking tasks
- investigate and explain the main input, output, processing and storage devices and functions of ICT systems
- describe a range of devices and processes for performing complex tasks using the correct ICT-specific terminology
- apply agreed processes for accessing and working with personal information and content
- access appropriate support when updating or learning new operational skills
- manage integrity of information and content in personal or collaborative digital environments
- reflect on, analyse and evaluate their operational skills to meet the requirements system resources, processes and conventions in personal or collaborative digital environments.