**Information and communication technology (ICT):**

Information and communication technology (ICT) involves the use of computers, its applications and communications facilities in teaching and learning activities. The use of ICT extends to all the teaching and learning in all subjects across the curriculum. The effective use of ICT is an ‘Approaches To Learning’ (ATL) skill.

Schools must ensure that a whole-school approach is in place to allow students to develop information technology literacy and become competent users of computers.

Depending upon the school resources, ICT should be used whenever appropriate:

• As a means of expanding students’ knowledge of the world in which they live

• As a channel for developing concepts and skills

• As a powerful communication tool.

ICT provides a wide range of resources and applications for teachers to explore in order to enhance teaching and learning

|  |  |  |
| --- | --- | --- |
| **ATL skill area** | **Student learning expectations could include:** | **Key questions for use with MYP units of work** |
| **Communication** | **Literacy**:  including reading strategies, using and interpreting a  range of content-specific terminology  **Being informed:**  including the use of a variety of media  **Informing others:**  including presentation skills using a variety of media | What communication tools do I use?  Which ways of communicating do I need to improve on?  How can I better communicate my understanding? |
| **Information literacy** | **Accessing information:**  including researching from a variety of sources using a range of technologies, identifying primary and secondary sources  **Selecting and organizing information:**  including identifying points of view, bias and weaknesses, using primary and secondary sources, making connections between a variety of resources  **Referencing:**  including the use of citing, footnotes and referencing of sources, respecting the concept of intellectual property rights | How can I access information?  How do I know if the information is reliable?  What will I do with this information? |

In most cases, technology teachers are given responsibility for providing students with the teaching and learning experiences to help them develop ICT literacy. The teaching of ICT skills **should not be confused with or take the place of** a computer technology course. ICT is simply a tool used to develop computer technology solutions using the Design Cycle.

**Applications of ICT in MYP**

Databases and spreadsheets

Graph plotter software

Dynamic geometry software

Computer algebra systems

Programming languages

Subject content-specific software

The uses of Graphic display calculators (GDC)

Use of Internet search engines to source materials

Researching using CD-Roms

Word processing or desktop publishing

Graphic organizers.

Creating presentations

Use of Computer Aided Design

Simulating stresses on bridge beams

Virtual battle re-enactments

Games as learning tools/facilitators

Learning language software/CDs

Video and video editing

Creating Podcasts/MP3s/Audio files

Video conferencing