

Lesson: 1. Wisdom and IT/Computing	Comic: 3
Overview of Key Skills Concepts – understand key vocabulary relating to computer ethics Skills and process – be able to use IT skills to produce an informative leaflet aimed at a specific audience	Cross-curricular links English: reading and writing PSHE: Health and Wellbeing RE: Morality and Ethics
Learning Objectives:	<ul style="list-style-type: none"> • To understand key vocabulary relating to computer ethics • To understand that wisdom can be defined as knowledge + ethics • To be able to use IT skills to produce an informative leaflet aimed at a specific audience
Key Teaching Points / Research Opportunities	<p>Discuss short statement:</p> <p>“Nicholas Maxwell, a contemporary philosopher in the United Kingdom, advocates that academia ought to alter its focus from the acquisition of knowledge to seeking and promoting wisdom. This he defines as the capacity to realize what is of value in life, for oneself and others. He teaches that new knowledge and technological know-how increase our power to act. Without wisdom though, Maxwell claims this new knowledge may cause human harm as well as human good.” <i>(Nicholas Maxwell (2007) From Knowledge to Wisdom. Pentire Press. Friends of Wisdom "an association of people sympathetic to the idea that academic inquiry should help humanity acquire more wisdom by rational means" founded by Maxwell.)</i></p> <p>Do you agree with Maxwell? Can you think of any examples of new inventions or new technology that could have been used for both good and bad (<i>e.g. nuclear power</i>)? When we consider the difference between right and wrong or good and bad behaviour, we are talking about morality. The word “ethics” means moral principles that govern a person's behaviour or the conducting of an activity.</p> <p>Should we consider ethics in the world of IT and Computing? Are there such things as computer ethics? There sure are! Let’s find out more...</p> <p>Let’s examine more detailed definitions of ethics and computer ethics as well as some more relevant word and phrases:</p> <p>What are Ethics?</p> <p>Ethics are a structure of standards and practices that influence how people lead their lives. It is not strictly implemented to follow these ethics, but it is basically for the benefit of everyone that we do.</p> <p>Ethics are unlike laws that legally mandate what is right or wrong. Ethics illustrate society’s views about what is right and what is wrong.</p>

Computer Ethics

Computer ethics are a set of moral standards that govern the use of computers. It is society's views about the use of computers, both hardware and software. Privacy concerns, intellectual property rights and effects on the society are some of the common issues of computer ethics

Privacy Concerns

Hacking – is unlawful intrusion into a computer or a network. A hacker can intrude through the security levels of a computer system or network and can acquire unauthorised access to other computers.

Malware – means malicious software which is created to impair a computer system. Common malware are viruses, spyware, worms and trojan horses. A virus can delete files from a hard drive while a spyware can collect data from a computer.

Data Protection – also known as information privacy or data privacy is the process of safeguarding data which intends to influence a balance between individual privacy rights while still authorising data to be used for business purposes.

Anonymity – is a way of keeping a user's identity masked through various applications.

Intellectual Property Rights

Copyright – is a form of intellectual property that gives proprietary publication, distribution and usage rights for the author. This means that whatever idea the author created cannot be employed or disseminated by anyone else without the permission of the author.

Plagiarism – is an act of copying and publishing another person's work without proper citation. It's like stealing someone else's work and releasing it as your own work.

Cracking – is a way of breaking into a system by getting past the security features of the system. It's a way of skipping the registration and authentication steps when installing a software.

Software License – allows the use of digital material by following the license agreement. Ownership remains with the original copyright owner, users are just granted licenses to use the material based on the agreement.

Computers and IT also have an effect on society:

Jobs – Some jobs have been abolished while some jobs have become simpler as computers have taken over companies and businesses. Things can now be done in just one click whereas before it takes multiple steps to perform a task. This change may be considered unethical as it limits the skills of the employees.

There are also ethical concerns on health and safety of employees getting sick from constant sitting, staring at computer screens and typing on the keyboard or clicking on the mouse.

Environmental Impact – Environment has been affected by computers and the internet since so much time spent using computers increases energy usage which in turn increases the emission of greenhouse gases.

There are ways where we can save energy like limiting computer time and turning off the computer or putting on sleep mode when not in use. Buying energy efficient computers with Energy Star label can also help save the environment.

Social Impact – Computers and the internet help people stay in touch with family and friends. Social media has been very popular

	<p>nowadays.</p> <p>Computer gaming influenced society both positively and negatively. Positive effects are improved hand-eye coordination, stress relief and improved strategic thinking. Negative effects are addiction of gamers, isolation from the real world and exposure to violence.</p> <p>Computer technology helps the government in improving services to its citizens. Advanced database can hold huge data being collected and analysed by the government.</p> <p>Computer technology aids businesses by automating processes, reports and analysis.</p> <p>Activity 1: Make an information leaflet that explains the words and phrases shown above. Aim at junior children...you may need to make it easier to understand for your intended audience...it might also be more appealing if you illustrate it throughout.</p> <p>Activity 2: Take the “Computer Ethics” quiz.</p>
Independent Work	Activities 1 and 2.
Plenary	<ul style="list-style-type: none"> • How would you define wisdom? • How would you define ethics? • How would you define computer ethics? • Let’s revise some of the key vocabulary? • So what do you know now that you didn’t know before? <p>Now let’s try the End-Of-Lesson Assessment.</p>
Resources, including ICT	<p>PC computers with screen magnification/speech</p> <p>Microsoft Office</p> <p>Quiz</p> <p>End-Of-Lesson Assessment</p> <p>Online quiz</p>
Key Questions	<ul style="list-style-type: none"> • What is wisdom? • What is morality? • What are ethics? • What considerations are relevant when examining computer ethics?
Vocabulary	<p>Morality, Ethics, Privacy, Hacking, Malware, Virus, Trojan Horse, Data Protection, Anonymity, Intellectual Property Rights, Copyright, Plagiarism, Cracking, Software, Environmental Impact, Social Impact, License.</p>
Success Criteria	<ul style="list-style-type: none"> • Ability to understand key vocabulary relating to computer ethics

	<ul style="list-style-type: none">• Ability to understand that wisdom can be defined as knowledge + ethics• Ability to use IT skills to produce an informative leaflet aimed at a specific audience
Assessment Opportunities	<ul style="list-style-type: none">• Post-Lesson Assessment sheet and online quiz• Leaflet