

Information Technologies and Careers

All units covered in IT are related to how IT is used within different careers, specifically Learning Objectives 1,3,4,5 and 6.

Learning Objectives 2, 7 and 8 specifically relate to the IT skills that would be used within business.

When opportunity arises careers are discussed and shared with pupils. This allows pupils to see how the subject they are covering relates to the real world and how these skills can be applied. It gives the Learning Objective a purpose rather than just a task to complete. By pupils understanding the purpose of what they are doing will allow them to make further progress as it will give them something to potentially aim for in the future.

Examples of Curriculum Links to Futures - Covered

	Curriculum Theme/Topic	How Do You Link This Theme/Topic to Careers?	What Careers Related Extracurricular Opportunities Are Offered?	What Employer/Employee Encounters Are Offered?
Year 10 and 11 - IT	1. LO1 – Tools and techniques used to initiate and plan solutions	Links to managing IT projects in commercial and organisations by using the Project Lifecycle e.g. Project Manager	UK Bebras Challenge offered to all pupils. Codementum International competition offered to all pupils.	Employee encounters being organised. Tasks being organised around the visits.
	2. LO3 – Understanding how data and information can be collected, used and stored	Links with careers in data management, collecting and using data and information. E.g. Database Developer	iDEA is offered to enhance employability.	
	3. LO4 – Factors to be considered when collecting and processing data and storing it	Links to career in law or commercial business e.g. IT Consultant.		
	4. LO5 – Importing and manipulating data	Understanding the use and manipulation of numbers		

	to develop a solution	e.g. Accountancy, Data Analyst, Market Data Analyst		
	5. LO6 – Different methods for processing data and presenting it	Understanding that data can be presented in a number of ways e.g. letters, graphs, reports, presentations. This will be linked with careers such as Customer Service Representatives		
	6. LO2, 7 and 8 – To plan and initiate a solution for a specific need, present the information and review the solution	To create solutions to scenarios set to prove skills. This can be linked to careers such as Project Managers.		
	7. Careers lesson 1 – Knowledge in the workplace - Data	Links to understand how the different skills we have previously discussed are used within jobs, specifically data.		
	8. Careers lesson 2 – Knowledge in the workplace - Ethics	Links to understand how the different skills we have previously discussed are used within jobs, specifically ethical issues.		

Applying IT Knowledge to The Workplace

Our pupils will apply the knowledge they are gaining from studying Information Technologies to a variety of workplace scenarios in the following ways.

Knowledge Lesson Title	Year Group	Within Which Unit (SoW)
Data	Year 10	<p>LO3 - Understanding how data and information can be collected, used and stored</p> <p>Pupils learn what is meant by 'Big Data' and why it presents immense opportunities as well as ethical problems for data analysis in modern societies. They will understand machine learning techniques that have been developed to identify patterns and extract meaningful information from these enormous datasets. Pupils will also learn how algorithms are developed to sift through big data and form useful insights.</p>
Ethics	Year 10	<p>LO1 – Tools and techniques used to initiate and plan solutions</p> <p>LO4 – Factors to be considered when collecting and processing data and storing it</p> <p>Pupils will be able to understand how a project manager is someone who coordinates a project from start to finish. This has been covered in LO1. This will require coordinating different people (e.g. designers), different teams, resources,</p>

		materials, timescales, costs and liaising with clients.
IT - Careers in IT (visit/talk)	Years 10/11	This will be placed at any point in the KS4 curriculum depending on the time available from outside visitors.
IT – Careers discussions	Years 10 and 11	All units covered in IT are related to how IT is used within different careers specifically: LO1, LO3, LO4, LO5, LO6

Using IT Skills in the Workplace

Our pupils will see the correlation between the skills they use in (subject) lessons and the skills that are used in the workplace, by looking in detail at 7 skills and trying school-based and workplace-based tasks for each skill.

Skills Lesson Title	Year Group	Within Which Unit (SoW)
IT- IT skills	Years 10 and 11	Units LO2, LO7, LO8 relate to the skills that would be needed in different IT careers.
Skills in IT – Data analysis (careers in IT)	Year 10	<p>LO3 – Understanding how data and information can be collected, used and stored</p> <p>LO4 – Factors to be considered when collecting and processing data and storing it</p> <p>LO2, 7 and 8 – To plan and initiate a solution for a specific need, present the information and review the solution</p> <p>Pupils will understand that we create a vast amount of digital data. Pupils will know that capturing and storing this data is an essential part of IT. Pupils will understand the concepts of attributes, records and files,</p>

		as well as learn about specific data types and structures, which are used to represent information, and how to apply them in different scenarios.
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