

Year 8 teaching objectives

NOTE: Objectives highlighted in a tint are related to reviewing, modifying and evaluating work as it progresses.

Finding things out	Developing ideas and making things happen	Exchanging and sharing information
<p>Using data and information sources</p> <ul style="list-style-type: none"> Understand how the content and style of an information source affect its suitability for particular purposes, by considering: <ul style="list-style-type: none"> its mix of fact, opinion and material designed to advertise, publicise or entertain; the viewpoints it offers; the clarity, accessibility and plausibility of the material. Devise and apply criteria to evaluate how well various information sources will support a task. Justify the use of particular information sources to support an investigation or presentation. <p>Searching and selecting</p> <ul style="list-style-type: none"> Extend and refine search methods to be more efficient (e.g. using synonyms and AND, OR, NOT). Explain the advantages of the methods used by different search engines and programs to search for data in various formats. <p>Organising and investigating</p> <ul style="list-style-type: none"> In an investigation: <ul style="list-style-type: none"> use software options and formats to store, retrieve and present electronic material efficiently; explore and interpret collected data in order to draw conclusions; assess the consistency of conclusions with other evidence. Understand: <ul style="list-style-type: none"> how data collection and storage are automated in commerce and some public services; the impact of electronic databases on commercial practice and society; potential misuse of personal data. 	<p>Analysing and automating processes</p> <ul style="list-style-type: none"> Automate simple processes by: <ul style="list-style-type: none"> creating templates; creating simple software routines (e.g. style sheets, web queries, control techniques on web pages). Consider the benefits and drawbacks of using ICT to automate processes (e.g. using wizards, templates). Represent simple design specifications as diagrams. <p>Models and modelling</p> <ul style="list-style-type: none"> Develop ICT-based models and test predictions by changing variables and rules. Draw and explain conclusions (e.g. 'the best value for money is obtained when ...'). Review and modify ICT models to improve their accuracy and extend their scope (e.g. by introducing different or new variables and producing further outcomes). <p>Control and monitoring</p> <ul style="list-style-type: none"> Develop and test a system to monitor and control events by: <ul style="list-style-type: none"> using sensors efficiently; developing, testing and refining efficient sequences of instructions and procedures; assessing the effects of sampling and transmission rates on the accuracy of data from sensors. Understand how control and monitoring has affected commercial and industrial processes (e.g. telecommunication, health and transport services). 	<p>Fitness for purpose</p> <ul style="list-style-type: none"> Recognise how different media and presentation techniques convey similar content in ways that have different impacts. Understand that an effective presentation or publication will address audience expectations and needs (e.g. the audience's levels of literacy, familiarity with a topic). Devise criteria to evaluate the effectiveness of own and others' publications and presentations, and use the criteria to make refinements. <p>Refining and presenting information</p> <ul style="list-style-type: none"> Plan and design presentations and publications, showing how account has been taken of: <ul style="list-style-type: none"> audience expectations and needs; the ICT and media facilities available. Use a range of ICT tools efficiently to combine, refine and present information by: <ul style="list-style-type: none"> extracting, combining and modifying relevant information for specific purposes; structuring a publication or presentation (e.g. using document styles, templates, time lines in sound and video editing, navigational structures in web media). <p>Communicating</p> <ul style="list-style-type: none"> Understand some of the technical issues involved in efficient electronic communications (e.g. speed and bandwidth, size and type of file, features of different browsers and e-mail software). Use ICT effectively to adapt material for publication to wider or remote audiences (e.g. as web articles or sites).