Opportunities for ICT in Stage 7

SCIENCE Opportunities for ICT:		
		Learners should
Stage 7		1. Use digital microscopes and visualisers with increasing accuracy to observe still and moving materials etc under magnification. Capture images for recording and review in a variety of ways, including presenting to others 2. Use time lapse photography to capture changes during experiments and changes in plants and other physical objects 3. Capture and utilise digital still and moving images, using these in their reports and presentations 4. |Use hand-held digital meters and dataloggers, selecting and using the appropriate device with some accuracy to record such environmental conditions, e.g. monitor light intensity testing leaf material for starch produced. Use a spreadsheet and graphs to support analysis of the data. Use results to confirm and predict 5. Use ICT to record and communicate, considering appropriate multimedia resource and the needs of their audience, e.g. describe plans for an investigation including the equipment, how they will measure and what variables they will measure, vary and control 6. Use simple data handling software, recording and manipulating data and sorting results for analysis 7. Use secondary sources (e.g. online/electronic), e.g. to research the life and discoveries of great scientists such as Galileo 8. Use online/electronic simulation resources to model aspects of science, e.g. the behaviour of light reflected by mirrors, for example, varying the angle of incidence

Opportunities for ICT in Stage 8

SCIENCE Opportunities for ICT:		
		Learners should
Stage 8		1. Use digital microscopes and visualisers accurately to observe still and moving materials etc under magnification, e.g. different types of roots in plants. Capture images for recording and review in a variety of ways, including presenting to others 2. Use time lapse photography to capture changes during experiments and changes in plants and other physical objects. Discuss the changes and use this data in presenting findings 3. Capture and utilise digital still and moving images, e.g. make a short movie about the effects on the human body of smoking 4. Use hand-held digital meters accurately to record environmental conditions to support an investigation, e.g. investigate the reflection and dispersion of white light 5. Use datalogging in investigations, e.g. use light gates to time the descent of different vehicles on a track to investigate the relationship of height dropped and velocity at different points on a slope 6. Use a spreadsheet and graphs to support analysis of collected data. Use results to confirm and predict, feeding into further enquiry