

Midlothian Council ICT Strategy

Opportunities for ICT in Mathematics

There are many obvious links between maths and ICT. For example, ICT can make a valuable contribution to the teaching of information handling – databases, spreadsheets and graphing tools, using open-content software such as *MS Works* or using *MS Logo* as part of ‘Shape, Position and Movement’. There are numerous content specific software titles, which will contribute to the teaching of ‘Number Money and Measure’ such as *Lifeskills Time and Money* or using *Let’s Go* in work carried out in ‘Shape, Position and Movement’. Much of the work already done in mathematics using traditional teaching methods could be carried out using ICT.

The main ICT strands that mathematics can contribute to are ‘collecting and analysing’, ‘control and modelling’ and ‘using the technology’. However, other strands in ICT such as ‘communicating and collaborating’ and ‘creating and presenting’ can also be contributed to as in the following example.

As part of a topic on ‘Food’, a Primary 6 class conducts a survey to find out what pupils buy from the tuck shop. The data is collected, analysed and presented in graphical form. As an extension to this, they form a collaborative study with children from another country and by using the internet and e-mail, exchange information and findings with them.

Maths activity	Maths strand	ICT strand	ICT activity
Conduct a survey of food bought at the tuckshop.	Collect	Creating and presenting	Using a word processor, create a simple questionnaire.
		Communicating and collaborating	E-mail questionnaire.
Create a simple spreadsheet to enter data.	Organise	Collecting and analysing	Create a simple spreadsheet to enter data.
Construct graphs and tables showing the results of the survey.	Display	Collecting and analysing	Use the graphing tools to create graphs and tables.
Find out the most and least popular items.	Interpret	Collecting and analysing	Sort spreadsheet.
Present the information and findings in the form of a report.	Organise/display	Creating and presenting	Using a word processor, create a document using text and graphics.
		Communicating and collaborating	E-mail report.

The following tables show where opportunities to use ICT arise in Level D Mathematics. This table could be used as part of a forward plan/scheme of work and spaces have been provided for possible lesson outlines. Examples of appropriate software, which can be found in the Midlothian Software Toolbox, are also given.