

Tim's Comments on the database evaluations

Not surprisingly, there was a great deal of unanimity in the evaluations - although different groups placed emphasis on varying aspects of the two programmes. Information Workshop was seen as easier to use - both in setting up a datafile (creating fields and records etc.) and in conducting simple searches. Access was praised for being (much) more powerful - allowing multiple tables and relationships between them; SQL and other complex queries; integrating with other programmes; and generally giving the user much more flexibility. It was also pointed out that, of the two packages, only Access allowed the exemplification of more difficult concepts.

So - which to use? I think that the answer is 'it depends on what you are trying to help the pupils learn'. Essentially, there are two kinds of things that one might wish a pupils to learn - the *concepts* associated with databases and the *technical skills* to implement these in a given package - and it is best if the focus of the pupils' attention is on only one of these at any given time.

My suggestion is that it is best to introduce database concepts using a simple flat-file database such as IW. Because the skills required to use this are minimal, the focus can (almost exclusively) be on the concepts.

Following this, the pupils can be taught how to implement the *same ideas* in Access - so here the focus can be on developing skills to implement concepts.

Finally, once the pupils are (relatively) familiar with Access, they can then use it to explore the more complicated concepts associated with data and databases - such as data validation and relationships.

(Although remember that in the session on Data Validity we saw how other kinds of software - especially Excel - provide a 'low skill' way of introducing the former of these. In this sense, Excel can be thought of as the equivalent of IW for introducing data validation techniques.)

Why then do many (most?) schools use only Access? I think there are two reasons:

- 1 it is 'free' in that it comes with a MS Office package
- 2 there may be a disproportionate (in my view) emphasis on teaching the skills required to use 'industry standard' software, at the expense of thinking carefully about which package is most suitable for helping pupils learn aspects of capability. We will return to this in the session on 'ICT in the teaching of IT'.