

Assessment

The assessment of pupils' work and subsequent target setting should become an integral part of the 'Framework for Delivering ICT'.

Effective assessment takes place when:

- It is regular
- Pupils are involved to jointly assess strengths and weaknesses
- It includes a range of methods
- There is a recording system in place
- Teachers make use of prior learning and information passed on by others
- Pupils receive feedback, some of which may be immediate

There are three main stages of assessment.

| Short Term | Medium Term | End of Key Stage |
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| Expected attainment | | | |
|---------------------|---------------------------------|-------------|---------------------------------|
| End of Year | Pupils who make slower progress | Most pupils | Pupils who make faster progress |
| 7 | Level 3 / 4 | Level 4 / 5 | Level 5 / 6 |
| 8 | Level 4 | Level 5 | Level 6 |
| 9 | Level 4 / 5 | Level 5 / 6 | Level 6 / 7 |

Short Term Assessment

The following may be considered as short term assessment:

Short term assessment is generally lesson focused and should help you judge whether teaching objectives have been met. Its purpose is to:

- Ensure that pupils can demonstrate certain skills and techniques
- Explain what they have done using correct technical language
- Check whether pupils have interpreted your teaching correctly
- Make sure that pupils understand the current or future activities
- Provide information for other staff including support staff
- Provide feedback to pupils

Generally, short term assessment is about working with pupils in the classroom, making observations and deciding whether differentiated work is required, by providing either extension material or more help.

Throughout the activities there are online tests. These are self-marking and pupils can resit them as often as they wish. You may wish to record pupils' scores or question them about their achievement.

Online test 1 (activity 1)

Online test 2 (activity 2)

Online test 2 (activity 4)

These online tests can also be used as part of your medium term assessment.

Where pupils work in pairs it is important that you can make a judgement for each pupil's commitment and achievement for that lesson. At times there may be gender bias; be aware of group dynamics.

During introductions and question and answer sessions, take note of those pupils who find it difficult to join in due to a lack of confidence or knowledge. Likewise, find those pupils who seem to require little help with the concepts and skills.

Medium Term Assessment

The following may be considered as medium term assessment:

Medium term assessment should assemble new information. Its purpose is to:

- Review progress that pupils have made during the unit of work:
 - Can they apply knowledge, understanding and skills?
 - What can they do and what do they know?
 - Are there areas of difficulty?
- Check progress against any existing targets
- Inform future planning
- Provide additional information that may be used when making end of year or end of key stage decisions

Generally, medium term assessment takes place at the end of a unit of work. A range of pupils' work should be looked at. If there are several annotated versions showing how pupils have built up the work these should be examined individually and as a whole.

Included within this unit is an 'End of Unit Test'. This is a self-marking test in a multimedia style. It tests the knowledge and understanding of the unit and questions can only be answered once. Pupils should be encouraged to revise for this test, as it will include the words that make up the language for learning.

Pupils cannot access the test from within the activities. It needs to be installed separately; this is to ensure it is delivered when the teacher requires it.

These online tests can also be used to help you decide the end of key stage assessment.

The recording of medium term assessments may take the following format:

- End of unit test mark recorded
- Best fit against one of the assessment criteria
- Checklist against the yearly teaching objectives

Where pupils work in pairs it is important that you can make a judgement for each pupil's commitment and achievement for the unit as a whole.

Objectives

This unit of work covers the following teaching objectives. Ensuring that these are met will form part of any medium term assessment and enable targets to be set.

Finding Information

Using data and information sources

- combine and refine information and data sources to answer and pose questions

Searching and selecting

frame searches in an appropriate and considered way in relation to the required results

- search for information, altering and developing the search as appropriate, checking findings for plausibility
- use search terms correctly

Organising and investigating

- save files using appropriate file names and organise files in a hierarchical folder structure
- identify the significant data required to solve a problem
- design a questionnaire or data-collection sheet to collect relevant data
- recognise the structure and format of data that can support checking and correcting to remove errors after entry; recognise that data may not be plausible and that this affects results
- generate simple queries using AND/OR operators applied to data items within fields
- consider examples of electronic databases in everyday life
- check whether the ICT tools they use are appropriate for the task

Developing Ideas

Analysing and automating processes

- use automated processes to support consistency of style and presentation

Models and modelling

- recognise the difference between data, text and formulae in a computer model and organise these so that the model is fit for purpose

Communicating Information**Fitness for purpose**

- recognise the limitations and opportunities of different layout formats and use these appropriately

Refining and presenting information

- match the content and style of their work to the audience and purpose

Communicating

- recognise the risks associated with the sharing of personal information digitally and to take actions to protect themselves

Evaluating**Evaluating work**

- select ICT tools which will support the development and accuracy of their work, and learn the benefits of checking, correcting and refining their work as it progresses
- explain the reasons for choices they have made
- understand when to use ICT to solve a problem

Assessment Criteria

The following may be considered as medium term assessment:

Although you will use the level descriptors to make a 'summative best fit' assessment at the end of the key stage, you will probably also like to monitor pupil progress at the end of each unit of work.

The following criteria bank only relates to this unit and its purpose is to:

- Break the assessment of the unit into small manageable parts, enabling teachers
 - to identify areas of achievement
 - to give confidence to pupils by showing progress, however small
 - to plan for the future
- Enable staff to show progress with individual pupils or whole classes
- Provide data for statistical analysis

Expectation from this unit can be summarised as:

- **Most pupils will:**

understand how a database organises its data and how Microsoft Access uses objects to store, view, search and report information. This may vary depending upon the software used by the school. Pupils will use a prepared database to learn about searching and reporting. They will create one of their own, entering records from a data capture sheet and making advanced searches. They will have an understanding of the Data Protection Act.
- **Some pupils will not have made so much progress and will:**

understand the basics of how a database works and the various parts of the school's database program. They will use a prepared example to make single keyword searches and view the information found. With help they will use wizards to create a simple database and enter records. They may have created their own data capture sheet or use a previously prepared one. Pupils understand the implications of having data about themselves held on a computer. They will give examples of where this occurs.

- **Some pupils will have progressed further and will:**

be able to describe various database solutions and the data that they may hold. They will be able to relate this to the Data Protection Act. Pupils will use an example database to search and view information using advanced search techniques. They will create a database of their own entering records from a data capture sheet that had been previously designed. With help, pupils can create tables, forms, queries and reports in Microsoft Access.

Levels are reported as whole numbers with intermediate progress as letters.

Each level subsumes the previous level.

If this unit has been completed as a paired activity thought must be given to how evidence of individual progress is gathered.

| | Skill | Knowledge & Understanding |
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| 4 | <p>With help, can use the basic tools of a database program.</p> <p>Can make keyword searches to find information.</p> <p>With help they will create a simple database using wizards without making choices of their own.</p> | <p>Pupils will offer obvious examples of where databases are used, e.g. school.</p> <p>They will describe the type of data that these databases hold.</p> |
| 4c | <p>Can use the tools within a database to view the records, make searches using prepared queries and look at reports. Can create their own database using wizards without making choices of their own.</p> <p>Have used a data capture sheet and can describe its function.</p> | <p>Better understanding shown of database use.</p> <p>Can describe the component parts, e.g. records and fields.</p> <p>Pupils have an understanding of the database software that the school uses. They can name the equivalent parts to Microsoft Access 'objects'.</p> |
| 4b | <p>Can create a database using wizards and with help has made decisions at each step.</p> <p>Can search using multiple criteria and prepared queries.</p> | <p>Can give examples where databases are used in society and the type of data they hold.</p> <p>Understands the implications of holding personal information on a computer and whether there needs to be any safeguards.</p> <p>Has some understanding of the Data Protection Act.</p> |

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| <p>4a</p> | <p>Can create a database using wizards and has made autonomous decisions at each step. Can search using multiple criteria and prepared queries.</p> <p>Can edit existing queries to find new information.</p> | <p>Can give good examples where databases are used in society and the type of data they hold.</p> <p>Understands that safeguards need to be taken to protect individuals and their personal information held on computers.</p> <p>Has a better understanding of the Data Protection Act principles.</p> |
| <p>5</p> | <p>This level can be used to identify pupils who can:</p> <ul style="list-style-type: none"> • use the basic database tools independently and reliably. • create a database for themselves choosing which parts of a wizard to include. • enter data into a table or form from a previously designed and completed data capture sheet. | <p>Pupils understand the options that wizards offer and can make choices based on an expected outcome.</p> <p>They have a better understanding of data types and can select to use the most appropriate one when creating fields.</p> |
| <p>5c</p> | <p>This level can be used to identify pupils who can:</p> <ul style="list-style-type: none"> • edit forms, queries and reports that they have previously created. • design and create data capture sheets that use a range of data types. | <p>To edit various objects, pupils will need a better understanding of the audience so that the presentation is appropriate.</p> <p>Pupils show a good understanding of data capture methods and can give examples other than paper based models.</p> |

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| <p>5b</p> | <p>Pupils can design a simple database from a set of specifications; creating and completing a data capture system.</p> <p>With little help they can either:</p> <ul style="list-style-type: none"> • Use wizards, selecting appropriate options. <p>OR</p> <ul style="list-style-type: none"> • Manually create objects. <p>Either option, pupils are now autonomous users of the database.</p> <p>Pupils can use keywords effectively to search the database including multiple criteria queries. The results are displayed in report format and this may have been edited.</p> | <p>Pupils have a reasonable understanding of databases in the wider context and can give examples of where data about themselves is kept. They can relate this to the Data Protection Act and they will have views about its effectiveness, e.g. what precautions are taken by the school to keep personal data secure?</p> <p>Pupils have a satisfactory understanding of database creation that enables them to work autonomously.</p> |
| <p>5a</p> | <p>This level can be used to identify pupils who:</p> <ul style="list-style-type: none"> • Have completed all the activities in the unit. • Can independently identify when to use the different database tools. • Can create a database for themselves, making changes to put right mistakes and editing reports so that they are presented well. • Can create their database with an audience in mind making it 'fit for purpose'. <p>Can use simple validation rules when setting up tables.</p> | <p>At this level pupils have a good understanding of databases, the various parts and where they are used in society. They can describe the role of the Data Protection Act.</p> <p>Pupils understand that the database needs to be 'fit for purpose' and that the design of forms and reports needs to be appropriate.</p> <p>Some pupils may understand 'validation' and have entered criteria to enable this to work with some fields.</p> <p>Understands that data can be checked by the software for errors in entry.</p> |

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| <p>6</p> | <p>At this level, pupils should be able to design their own database system including their own choice of fields and data types.</p> <p>The complexity should be sufficient to require some form of relationships.</p> <p>A switchboard menu would possibly be included to help users navigate the database.</p> <p>This unit of work does not include these skills.</p> | <p>This level requires pupils to have a much deeper understanding of how the database stores and uses its data, including the use of relationships.</p> <p>This unit of work does not require pupils to work at this level.</p> |
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End of Key Stage

The following may be considered as end of key stage assessment:

Note: *The guidelines for assessing and reporting ICT at the end of key stage may change. Please keep yourself regularly updated by visiting the appropriate Government sites. We will keep updated and downloadable information on our website.*

Presently, teachers are required to give a level for each pupil for their ICT attainment. These should be awarded using the level descriptors and a model of 'best fit'.

During the key stage you may have monitored pupil progress using levels broken down into smaller steps (see medium term assessment). These, together with other assessments, should help you decide on a level that best describes the attainment of each pupil.

It is useful if all teachers responsible for awarding these levels moderate a sample of work. It may be that the department has assembled a portfolio of work for this purpose.

Other assessments that can feed into this are:

- End of year examinations
- End of unit tests
- Pupil reviews